APPENDIX A

NOP/Initial Study and Comment Letters

Coast Colleges

COASTLINE COMMUNITY COLLEGE · GOLDEN WEST COLLEGE GWC HUNTINGTON BEACH, CA · ORANGE COAST COLLEGE

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January 9, 2014

To: See Attached Distribution List

From: Coast Community College District
1370 Adams Avenue
Costa Mesa, California 92626

Subject: Notice of Preparation of a Draft Program Environmental Impact Report (PEIR)

Coast Community College District (CCCD) will be the lead agency and will prepare a Program Environmental Impact Report (PEIR) for the proposed project identified below. CCCD is requesting your view as to the scope and content of the environmental information to be included in the PEIR. Responsible agencies are requested to indicate their statutory responsibilities in connection with the proposed project.

The description, location, and the potential environmental effects resulting from the proposed project are contained in the Initial Study, which is available through the Coast Community College District website (http://www.cccd.edu/aboutus/master-planning/Pages/default.aspx).

Due to the time limits mandated by state law, your response must be sent at the earliest possible date but no later than 30 days after receipt of this notice. A public scoping meeting will be held on January 23, 2014, at 6:00 p.m. in the Learning Resource Center, Room 250 at Golden West College.

Please send your response to Mr. Jerry Marchbank at the address shown above. We will need the name of a contact person in your agency.

Project Title: Vision 2020 Facilities Master Plan PEIR, Golden West College

Project Location: Golden West College, generally bound by McFadden Avenue to the north, Gothard Street to the east, Edinger Avenue to the south, and Golden West Street to the west.

Jerry Marchbank
Senior Director, Facilities, Planning and Construction

Golden West College Vision 2020 Facilities Master Plan
Initial Study

Prepared for:

Coast Community College District
1370 Adams Avenue
Costa Mesa, California 92626
Contact: Jerry Marchbank
Senior Director, Facilities, Planning, and Construction

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JANUARY 2014

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TABLE OF CONTENTS

Section **Page No.**

ACRONYMS AND ABBREVIATIONS ..... **III**

1.0 INTRODUCTION **1**
1.1 California Environmental Quality Act Compliance 1
1.2 Purpose of the Notice of Preparation and Initial Study 2
1.3 Availability of the Notice of Preparation and Initial Study 2

2.0 PROJECT LOCATION **3**

3.0 PROJECT DESCRIPTION **5**
3.1 Project Objectives 6
3.2 Environmental Setting 6
3.3 Proposed Master Plan Elements 7
3.3.1 Proposed Building Renovations/Modernization 9
3.3.2 Proposed Building Demolition 10
3.3.3 Site Improvement Elements 10
3.4 Project Phasing 11

4.0 PUBLIC REVIEW PROCESS **13**

5.0 SUMMARY OF FINDINGS **15**

6.0 INITIAL STUDY CHECKLIST **19**
6.1 Aesthetics 24
6.2 Agriculture and Forestry Resources 26
6.3 Air Quality 29
6.4 Biological Resources 31
6.5 Cultural Resources 34
6.6 Geology and Soils 36
6.7 Greenhouse Gas Emissions 39
6.8 Hazards and Hazardous Materials 41
6.9 Hydrology and Water Quality 44
6.10 Land Use and Planning 48
6.11 Mineral Resources 50
6.12 Noise 51
6.13 Population and Housing 53
6.14 Public Services 54
6.15 Recreation 56
6.16 Transportation and Traffic 57
6.17 Utilities and Service Systems 59
6.18 Mandatory Findings of Significance 62

TABLE OF CONTENTS (CONTINUED)

Section **Page No.**

7.0 REFERENCES AND PREPARERS 65
7.1 References Cited 65
7.2 List of Preparers 68

APPENDIX

A NOP Distribution List

FIGURES

1 Regional Location 69
2 Local Vicinity 71
4 Proposed Campus Land Uses 75
5 Proposed Demolition 77
6 Proposed Vehicular Entryway, Circulation, Parking, and Service Access Road Improvements 79
7 Proposed Pedestrian Circulation Improvements 81
8 Vegetation Map 83
9 Soils Map 85

TABLES

1 Golden West College Planning Projections 5
2 Golden West College Enrollment Trends by Location 6

ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Definition
AB	Assembly Bill
AQMP	Air Quality Management Plan
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CMP	Orange County Congestion Management Program
CNRA	California Natural Resources Agency
District	Coast Community College District
DSA	Division of the State Architect
EHS	Environmental Health and Safety Department
EIR	Environmental Impact Report
GHG	Greenhouse Gas
GWC	Golden West College
IS/NOP	Initial Study/Notice of Preparation
LOS	Level of Service
NPDES	National Pollutant Discharge Elimination System
PEIR	Program Environmental Impact Report
RWQCB	Regional Water Quality Control Board
SCAQMD	South Coast Air Quality Management District
SWPPP	Stormwater Pollution Prevention Program

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1.0 INTRODUCTION

The Coast Community College District (District) is updating its Facilities Master Plan for all three of its Orange County campuses: Golden West College (GWC), Orange Coast College, and Coastline Community College. The Vision 2020 Facilities Master Plan (Vision Plan; District 2011) provides an analysis of the evolving student body and makes planning recommendations based on their educational needs. The District is undertaking a comprehensive improvement and building program to meet enrollment needs and to make the upgrades and repairs of existing buildings as well as construct new facilities to improve the safety and educational experience of those attending the colleges in accordance with Measure M. Measure M was passed in November 2012 and issues $698 million in bonds in order to fund the expansion of courses and academic buildings in engineering, math, science, and technology, as well as upgrade technologies, construct and repair facilities, and improve resources to active military and veterans for all three of the District campuses (District n.d.).

At GWC, the District plans to construct new larger buildings to accommodate the growing student body while replacing aging classrooms. GWC intends to add urban character to existing pedestrian walkways and open spaces through the addition of outdoor furniture and lighting. To integrate the campus with the surrounding community, vocational, athletic, and conferencing facilities would be developed with the intent of serving students and providing services to the public. Entrepreneurial opportunities, such as the Boys and Girls Club gymnasium facilities and the development of recreational facilities in the northeast corner of campus, would be pursued in order to generate more revenue for the campus. Enhancement of pedestrian and vehicular entryways and pathways would improve campus circulation and open the campus to the community.

1.1 California Environmental Quality Act Compliance

The California Environmental Quality Act (CEQA) serves as the main framework of environmental law and policy in California. CEQA emphasizes the need for public disclosure and identifying and preventing environmental damage associated with proposed projects. Unless deemed categorically exempt, CEQA is applicable to any project or program that must be approved by a public agency in order to be processed and established. This proposed project does not fall under any of the statutory or categorical exemptions listed in the 2013 CEQA Statute and Guidelines (California Public Resources Code, Section 21000 et seq.; 14 CCR 15000 et seq.), and therefore must meet CEQA requirements.

Considering the proposed project has the possibility of creating a significant impact, the preparation of an Environmental Impact Report (EIR) is required by CEQA. The EIR will be analyzed at a program level, as the proposed project fits under the scope of a program EIR (PEIR), as stated in Section 15168(a) of the CEQA Guidelines:

A program EIR is an EIR which may be prepared on a series of actions that can be characterized as one large project and are related either:

- Geographically,
- A[s] logical parts in the chain of contemplated actions,
- In connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program, or
- As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways (14 CCR 15168(a)).

1.2 Purpose of the Notice of Preparation and Initial Study

The intent of this document is to provide an overview and analysis of the environmental impacts associated with the project proposed for GWC by the District. This document is accessible to the public, in accordance with CEQA, in order to receive feedback and input to be discussed in the PEIR.

1.3 Availability of the Notice of Preparation and Initial Study

The Initial Study/Notice of Preparation (IS/NOP) for GWC is being distributed directly to numerous agencies, organizations, interested groups, and persons during the scoping period. The IS/NOP is also available for review at the following locations:

- Coast Community College District Headquarters, 1370 Adams Avenue, Costa Mesa, California 92626
- Helen Murphy Branch Library, 15882 Graham St., Huntington Beach, California 92649.

In addition, the IS/NOP (see Appendix A for the NOP) is available online at the District's website (http://www.cccd.edu/news/publications.aspx).

2.0 PROJECT LOCATION

GWC is an approximately 120-acre site located in the City of Huntington Beach in northwest Orange County. The project site is surrounded by the cities of Westminster to the north, Santa Ana to the east and Huntington Beach to the west and the south. Figure 1 shows GWC's regional location. Specifically, the campus is bound by McFadden Avenue to the north, Gothard Street to the east, Edinger Avenue to the south, and Goldenwest Street to the west (see Figure 2). The City of Westminster is located immediately north of the campus across McFadden Avenue, and is characterized by low-density housing near the campus. More low-density neighborhoods are located to the west of Goldenwest Street. South of Edinger Avenue) and east of Gothard Street (on the south side of the Bella Terra Shopping Center), are commercial/retail neighborhoods that the City of Huntington Beach identified as a mixed-use area in the General Plan Map (City of Huntington Beach 2010a). A CVS Pharmacy is located within the northwest corner of the campus and a retail center, not owned by the District, is next to the southeast edge of the campus. Primary freeway access to the campus would be via Interstate 405 and California State Route 39 (commonly known as Beach Boulevard), which is minutes from the campus.

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3.0 PROJECT DESCRIPTION

GWC plans to renovate most of its facilities, as many of the buildings currently in use have exceeded their life span, with some buildings dating back to the 1960s. Campus entrances would also be made to look more accessible to the public through visual enhancement of entryways. By improving campus accessibility, GWC will be more inviting to the surrounding community.

GWC had an enrollment of 13,673 students in 2009, which is projected to grow to 15,391 students in 2020, representing a 1.14% annual average growth rate (District 2011). Weekly student contact hours are also expected to increase from 172,832 in fall 2009 to 207,747 in fall 2020, as shown in Table 1. The Vision Plan identifies a need for an additional 20,000 assignable square feet of academic space at GWC by 2020 to accommodate this growth.

Table 1
Golden West College Planning Projections

Timing	Weekly Student Contact Hours	Unduplicated Student Enrollment
Fall 2009	172,832	13,673
Fall 2020	207,747	15,391

Source: District 2011.

GWC offers career and technical education courses but primarily focuses on transfer and general education, as 78% of weekly student contact hours were associated with courses in arts and letters, mathematics and sciences, and business and social sciences in the fall 2009 semester (District 2011). Considering the projected enrollment growth and the popularity of general education courses, the District proposes to construct a Math/Science Building, a Language Arts Complex, and Business/Social Sciences/Administrative Office Building. Career and technical education makes up 10% of weekly student contact hours and enrollment in these courses is expected to grow. The replacement of the Criminal Justice Building, renovation of the Automotive Building, and construction of a Cosmetology Building are all intended to address building deficiencies and support the instructional needs of these programs. The District proposes the construction of a Public Safety Office and One-Stop Student Center and renovations to the Physical Education Outdoor Labs, Central Warehouse/Corporation Yard, and the Technology Building, to accommodate the growing student body. The Vision Plan examined enrollment trends for the fall semesters of the years 2001 and 2009 and concluded that there was an overall increase in the percentage of out-of-district students, from 44.7% to 56.1%, in comparison to in-district students, which saw a decrease from 53.5% to 43.9%, as illustrated in Table 2. The increase in out-of-district students suggests an increase in commuting students. Although it is projected that the current number of parking stalls will be sufficient to meet future needs, improvements to vehicular entries and designated drop-off zones are proposed to enhance circulation.

Table 2
Golden West College Enrollment Trends by Location

Source/Location	Fall 2001	Fall 2009
In-District Students	53.5 %	43.9 %
Out-of-District Students	44.7 %	56.1 %

Source: District 2011.

The District would like to increase entrepreneurial activities and attract visitors to the campus through the development of new facilities and by improving programs already in place. A joint venture with the Boys and Girls Club is currently in place that would include the construction of joint-use gymnasium facilities. The college is also considering the development of recreational facilities in the northeast corner of campus that would be accessible to the public as well as students of GWC. The construction of a housing and mixed-use development in the southeast region of the campus, where the Business Building, Criminal Justice Training Center, Student Services and Admissions Building, Administration Building, and Counseling Division are currently located, would potentially provide housing and retail services to students and members of the public. The public would also be encouraged to use the newly renovated athletic facilities, theater and amphitheater, and the conferencing facilities housed in the newly constructed Business/Social Sciences/Administrative Office Building. The development of a conference center would be enhanced by the use of existing food service facilities.

3.1 Project Objectives

- Provide the building space to meet the District's instructional needs and academic mission.
- Update and modernize existing building space to meet the District's instructional needs.
- Accommodate growth in the student body over the planning horizon through 2020.
- Provide joint venture and entrepreneurial opportunities that generate revenue and support the academic needs and mission of the campus.
- Enhance connection to the core of the campus by improving vehicular circulation and gateways and creating open space and walkways for pedestrian activity.

3.2 Environmental Setting

The GWC campus is designated as public land in the City of Huntington Beach's General Plan. Currently, GWC houses more than 30 buildings, which occupy approximately 481,000 assignable square feet (District 2011). A CVS Pharmacy on land owned by the District is located on the northwest corner of the campus. Parking lots are located along the perimeter of the campus and occupy most of the western, southern, and eastern edges of the campus. The north

side of campus houses athletic fields and facilities. Classrooms and other learning facilities make up the center of the site. A 9-acre retail site not owned by the District is located on the southeast corner, next to the intersection of Gothard Street and Edinger Avenue.

3.3 Proposed Master Plan Elements

Based on the information contained in the 2020 Vision Plan, some Master Plan elements would be assessed at the program level because specific project details are not known at this time. A few of these elements would be dependent upon a future joint-venture partnership between the District and a developer. Project-specific plans would be developed after the joint venture was initiated. Other Master Plan elements do have detailed information and would contain project-level assessment, as identified below. See Figure 3 for existing campus land uses, Figure 4 for proposed campus land uses, and Figure 5 for proposed demolition.

Program elements include the following:

- Boys/Girls Club Gymnasium Facilities: This joint-venture will be located in the northeast region of the campus, west of the Gothard Street parking lot and south of the athletic fields.
- Renovation/Construction of the Physical Education Outdoor Lab: This project involves the development of relocated, shared-use (campus and community) recreational facilities. This project would be supported by a public–private partnership with a developer not yet identified.
- New Recreational Facilities/Fields: Redevelopment would occur in the athletic fields in the northern region of the campus. New recreational facilities would also be constructed in the undeveloped northeast corner of campus. It is not known whether this section would involve a public–private partnership.

Housing/Mixed-Use Development Opportunities: This project would consist of commercial/ retail uses on the street level and student residential use on the upper levels. This would be a public–private partnership with a developer not yet identified. Development would occur in the southeast corner of campus, where the Business, Administrative/Student Services, and Criminal Justice Buildings are currently located.

Project elements include the following:

- New Criminal Justice Training Center
- New Math/Science Building
- New Language Arts Complex
- New Business/Social Science/Administrative Office Building

- New Cosmetology Building
- New Public Safety Office.

Additional detail about these project elements is provided herein.

New Criminal Justice Training Center

The District proposes the demolition of the existing Criminal Justice Building at the south end of campus. A new building would be constructed in the northeast corner of campus, just south of the existing athletic field and bordering Gothard Street. The new building would replace the existing, out-of-date building.

New Math/Science Building

The construction of the new building would take place in the southwest corner of campus. This building would replace the Math/Science Building currently located in the center of campus. Replacement of the current building would allow for infrastructure updates and would provide more classroom space. The building would house classrooms for science and math courses.

New Language Arts Complex

The Humanities Building and Health Sciences Building located at the center of campus would be demolished and a Language Arts Complex would be constructed at the same location. The new building would see an expansion to the west. Classrooms for courses in arts and letters would be offered in the new building.

New Business/Social Sciences/Administrative Office Building

This project would entail the demolition of smaller buildings to build a larger, more efficient, multiuse building. The new building would be located on the site of the current Science/Math Building at the center of campus, which is to be demolished. This building would replace the Administrative/Student Services Building and the Business Building at the southeast corner of campus, both of which would be demolished. Conference facilities would be included and would be available for public use and could generate revenue.

New Cosmetology Building

Construction of the new Cosmetology Building would occur at the southeast corner of campus, just north of the non-district-owned retail site. The outdated Cosmetology Building, located in the core of the campus and west of the Fine Arts Building, would be demolished. This new facility would include a retail space as well.

New Public Safety Office

The new building would be constructed at the southwest corner of campus, on the border of two parking lots on the southern and western edges of campus. The existing Campus Safety Office, located on the western edge of campus, would be demolished. This new location would allow for ease of access from the southwest parking lots and the core of campus. The office would also be able to provide supervision of swap-meet activities at the parking lot on the southwest edge of campus. This new facility will also include an Emergency Operations Center and emergency supply storage to better prepare the campus for emergencies.

3.3.1 Proposed Building Renovations/Modernization

- Central Warehouse/Corporation Yard: The existing Central Warehouse/Corporation Yard in the northwest corner of campus would be renovated and expanded.
- Automotive Technology Building: The project involves the renovation of the existing building to correct building deficiencies and support current instructional needs. The building is located in the western portion of the campus.
- Technology Building: The project involves the renovation of the existing building to correct building deficiencies and support current instructional needs. The building is located in the western portion of the campus.
- Physical Education Training and Rehab Center: This project involves the renovation of the old Health Center in the northern portion of the campus, south of the Physical Education Outdoor Labs. The existing facility is a temporary building and would be demolished.
- One-Stop Student Center: This project includes the demolition of the Boyce Library to replace building systems and construct a new centralized one-stop location for student services at the core of campus. The project would be located at the center of the campus.
- Physical Education Outdoor Labs: This project involves renovation of the existing facilities in the northern portion of the campus to provide enhanced, state-of-the-art facilities. This project could be supported by a public–private partnership with a developer not yet identified. Recreational facilities, which would be open for public use, would be included in the renovation.
- Community Services Building: This project involves the renovation and expansion of the existing Community Services Building, located in the southeast corner of the campus. The existing building would be renovated to correct building deficiencies and support current academic needs and expanded community use.

3.3.2 Proposed Building Demolition

- Campus Safety Office
- Math/Science Building
- Cosmetology Building
- Graphics Building
- Health Science/Public Safety Building
- Criminal Justice Building
- Boyce Library
- Humanities Building
- Automotive Building
- Child Care Center
- Business Building
- Administrative/Student Services Building Physical Education Training and Rehab Center

3.3.3 Site Improvement Elements

Vehicular Entryways, Circulation, and Parking

The Facilities Master Plan includes the enhancement of primary and secondary entries through consistent landscaping and signage. Pedestrian drop-off zones would be created at the end of the primary vehicular access entries on Goldenwest Street, Edinger Avenue, and Gothard Street. All parking lots would require additions such as lighting, signage, parking ticket dispensers, and blue emergency phone kiosks. The parking lots on the south and west sides of the campus would require landscape renovations. See Figure 6 for proposed vehicular entryways, circulation, parking, and service access road improvements.

Pedestrian Entryways and Circulation

Existing pedestrian walkways on the GWC campus are asphalt roads shared with service vehicles. New walkways are proposed to improve pedestrian circulation. New primary and secondary walkways would begin at the parking lots on the west, south, and east sides of campus and terminate at the core of campus. Walkways would be constructed around buildings so not as to impede students on their route to the core of the campus. A pedestrian bridge would be constructed across Gothard Street to allow students to cross safely from the public transit stop at the corner of Center Street and Gothard Street to campus. See Figure 7 for proposed pedestrian entryway and circulation improvements.

Service Access

Three service access roads are proposed by the District. The first service access road would be from McFadden Avenue to the Corporation Yard/Warehouse. An additional road would begin at the primary entryway from the western parking lot and terminate at the Food

Service/Printing area in the center of campus. The final road would begin at the primary entryway from the eastern parking lot to the Theatre/Arts area in the center of campus. See Figure 6 for service access roads.

Open Space

An urban street, quad, garden, community arts plaza, student dining area, and multiple lawns and greens would be developed in the core of the campus to provide places for students, visitors, and employees to gather informally between classes. Lighting, signage, and street furniture would be added to these open spaces to create a welcoming environment. See Figure 4 for proposed open space areas.

Site Infrastructure

The installation of a thermal energy storage unit would occur just north of the current Central Plant. This system would store energy to be used later for heating, cooling, or power generation.

3.4 Project Phasing

The Vision Plan would be implemented over 8 academic years in three phases. The proposed construction phasing is outlined below.

Phase 1 (2013–2015)

- Interior building modifications
- Installation of security, access, surveillance infrastructure
- Classroom improvements
- Construction of the relocated Campus Safety Building
- Physical Education Training and Rehab Center (renovation)
- Boys/Girls Club gymnasium facilities

Phase 2 (2015–2017)

- One-Stop Student Center
- Math/Science Building
- Criminal Justice Training Center

Phase 3 (2017–2021)

- Cosmetology Building
- Language Arts Complex
- Technology Building

Unscheduled Projects

- Housing/mixed-use development opportunities
- New Business/Social Sciences/Administrative Office Building
- Central Warehouse/Corporation Yard (renovation)
- Automotive Technology Building (renovation)
- Physical Education Outdoor Labs (renovation)
- Community Services Building (renovation)

4.0 PUBLIC REVIEW PROCESS

Required Permits and Approvals

The lead agency, the District, is responsible for CEQA clearance and site plan review. A public agency, other than the lead agency, that has discretionary approval over the project is known as a "responsible agency," as defined by the CEQA Guidelines (14 CCR 15000 et seq.). The responsible agencies and their corresponding approvals for this project include the following:

State of California

- Division of the State Architect (approval of construction drawings)
- Department of Toxic Substances Control.

Regional Agencies

- Santa Ana Regional Water Quality Control Board (National Pollutant Discharge Elimination System Permit Program).

City of Huntington Beach

- Department of Public Works (traffic)
- Fire Department (emergency access)
- Building Division (building permit).

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5.0 SUMMARY OF FINDINGS

The District finds that the project could have a significant adverse effect on the environment based on the results of the Initial Study Checklist, as described in Section 6.0. Potentially significant effects have been identified, and the District has decided to prepare a PEIR to address the following impacts:

1. **Aesthetics:** The proposed project could have a substantial effect by degrading the existing visual quality of a site or creating a new source of substantial light or glare. See Section 6.1, Aesthetics, for additional information.
2. **Agriculture and Forestry Resources:** The proposed project would not have an impact on agricultural resources. See Section 6.2, Agriculture and Forestry Resources, for additional information.
3. **Air Quality:** Short-term, construction-related impacts are anticipated to occur due to fugitive dust and emissions from vehicles. The operational phase of the project could also result in a substantial increase in emissions. In order to accurately determine the project's potential impacts on air quality, further analysis will be required. Impacts are considered potentially significant. See Section 6.3, Air Quality, for additional information.
4. **Biological Resources:** The proposed project could result in significant impacts to special-status wildlife and plant species and habitat on the project site and could interfere substantially with the movement of a migratory wildlife species. These issues will be analyzed further in the PEIR. Impacts are considered potentially significant. See Section 6.4, Biological Resources, for additional information.
5. **Cultural Resources:** The proposed project could have the potential to expose cultural, archaeological, or paleontological resources during ground-disturbing activities, or cause a substantial adverse change in the significance of a historical resource. Impacts are considered potentially significant. See Section 6.5, Cultural Resources, for additional information.
6. **Geology and Soils:** The proposed project could expose people or structures to adverse risks associated with hazardous geologic or soil conditions. Impacts are considered potentially significant. See Section 6.6, Geology and Soils, for more information.
7. **Greenhouse Gas Emissions:** The proposed project would result in temporary construction-related emissions. During the operational phase, emissions would also increase due to higher energy usage. In order to accurately determine the proposed project's potential impacts on greenhouse gas emissions, further analysis will be required. Impacts are considered potentially significant. See Section 6.7, Greenhouse Gas Emissions, for additional information.

8. **Hazards and Hazardous Materials:** The proposed project could introduce risk of exposure to hazardous materials to people or the environment. See Section 6.8, Hazards and Hazardous Materials, for additional information.
9. **Hydrology and Water Quality:** Construction activities associated with implementation of the proposed project would have the potential to result in temporary construction-related impacts on water quality from erosion and sedimentation. Proposed project operation could violate water quality standards or waste discharge requirements, deplete groundwater supplies, and degrade water quality. Impacts to hydrology and water quality will be analyzed further in the PEIR. See Section 6.9, Hydrology and Water Quality, for additional information.
10. **Land Use and Planning:** The proposed project would have a less than significant impact or no impact on land use and planning. See Section 6.10, Land Use and Planning, for more information.
11. **Mineral Resources:** The proposed project would not have an impact on mineral resources. See Section 6.11, Mineral Resources, for additional information.
12. **Noise:** The proposed project could expose persons to noise levels that exceed standards or to excessive ground-borne vibration or ground-borne noise levels, and result in a substantial permanent, temporary, or periodic increase in ambient noise levels during construction or operation of the proposed project. Noise impacts will be analyzed further in the PEIR. Refer to Section 6.12, Noise, for more information.
13. **Population and Housing:** The proposed project would not divide an established community or displace people or housing. However, the proposed project could stimulate growth. This impact will be analyzed further in the PEIR as discussed in Section 6.13, Population and Housing.
14. **Public Services:** The proposed project could result in impacts to fire protection, police protection, and schools due to access issues and possible disturbances from project construction and operation. See Section 6.14, Public Services, for additional information.
15. **Recreation:** The proposed project would not have an impact on recreational facilities. See Section 6.15, Recreation, for additional information.
16. **Transportation/Traffic:** During construction and operation of the proposed project, increases in traffic due to construction worker commutes, equipment and material deliveries, and increases in student enrollment and campus visitors may occur. The proposed project could also introduce hazards to roadways, walkways, and bike paths. This impact will be analyzed further in the PEIR. See Section 6.16, Transportation and Traffic, for additional information.

17. **Utilities and Service Systems:** The proposed project could have a significant impact to utilities and service systems, as the project may require the construction of new stormwater drainage facilities and water and wastewater treatment facilities and could require new or expanded water entitlements or resources. The proposed project would be required to comply with solid waste statutes and would be required not to adversely impact landfill capacity. See Section 6.17, Utilities and Service Systems, for additional information.
18. **Mandatory Findings of Significance:** The proposed project could result in significant impacts. See Section 6.18, Mandatory Findings of Significance, for more information.

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6.0 INITIAL STUDY CHECKLIST

1. Project title:

Golden West College Vision 2020 Facilities Master Plan Program Environmental Impact Report

2. Lead agency name and address:

Coast Community College District (District)
1370 Adams Avenue
Costa Mesa, California 92626

3. Contact person and phone number:

Jerry Marchbank, Senior Director, Facilities, Planning and Construction, 714.438.4731

4. Project location:

Golden West College (GWC)
15744 Goldenwest Street
Huntington Beach, California 92647

5. Project sponsor's name and address:

Coast Community College District
1370 Adams Avenue
Costa Mesa, California 92626

6. General plan designation:

Public School

7. Zoning:

Public-Semipublic

8. Description of project. (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary):

The District plans to prepare a Program Environmental Impact Report (PEIR) to provide the public and responsible agencies with information about the potential environmental

effects of the proposed Vision 2020 Facilities Master Plan (Vision Plan) improvements for GWC, located in Huntington Beach, California. The Vision Plan provides an analysis of the evolving student body and makes planning recommendations based on educational needs. The District is undertaking a comprehensive improvement and building program to meet enrollment demands and to make the upgrades and repairs of existing buildings as well as constructing new facilities to improve the safety and educational experience of those attending the colleges in accordance with Measure M.

9. Surrounding land uses and setting (Briefly describe the project's surroundings):

The proposed project site is an approximately 120-acre site located in the City of Huntington Beach in northwest Orange County. The project site is surrounded by the cities of Westminster to the north, Santa Ana to the east, and Huntington Beach to the west and the south. Specifically, GWC is bounded by McFadden Avenue to the north, Gothard Street to the east, Edinger Avenue to the south, and Goldenwest Street to the west. The City of Westminster is located immediately north of the campus across McFadden Avenue, and is characterized by low-density housing near the campus. More low-density neighborhoods are located to the west of Goldenwest Street. South of Edinger Avenue and east of Gothard Street are commercial/retail neighborhoods. A CVS Pharmacy is located within the northwest corner of the campus and a retail center, not owned by the District, is next to the southeast edge of the campus.

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):

Division of the State Architect for approval of construction drawings

Department of Toxic Substances Control for any activity that may involve the hazardous waste handling and disposal

Occupational Health and Safety Administration to be notified of the proposed construction, renovation, and demolition plans

Santa Ana Regional Water Quality Control Board for the issuance of a National Pollutant Discharge Elimination System Permit

Huntington Beach Department of Public Works for activities that could impact traffic

Huntington Beach Fire Department for review of project design regarding emergency access

Huntington Beach Building Division for issuance of building permit.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact," as indicated by the checklist on the following pages.

☒ Aesthetics	☐ Agriculture and Forestry Resources	☒ Air Quality
☒ Biological Resources	☒ Cultural Resources	☒ Geology and Soils
☒ Greenhouse Gas Emissions	☒ Hazards and Hazardous Materials	☒ Hydrology and Water Quality
☐ Land Use and Planning	☐ Mineral Resources	☒ Noise
☒ Population and Housing	☒ Public Services	☐ Recreation
☒ Transportation and Traffic	☒ Utilities and Service Systems	☒ Mandatory Findings of Significance

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☒ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

1/6/14
Date

EVALUATION OF ENVIRONMENTAL IMPACTS:

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an Environmental Impact Report (EIR) is required.
4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
    a. Earlier Analysis Used. Identify and state where they are available for review.
    b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c. Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
   a. The significance criteria or threshold, if any, used to evaluate each question; and
   b. The mitigation measure identified, if any, to reduce the impact to less than significance.

6.1 Aesthetics

I. AESTHETICS – Would the project:				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☒	☐	☐	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☒	☐	☐	☐

a) Would the project have a substantial adverse effect on a scenic vista?

Less Than Significant Impact. The proposed project involves the construction of a variety of structures, the visual enhancement of entryways, and the improvement of pedestrian and vehicular circulation on the GWC campus as part of the Vision Plan. Construction activities including grading and excavation could have a temporary impact on views due to the presence and staging of equipment. However, the area surrounding the project site is characterized by residential and commercial uses. The City of Huntington Beach General Plan does not identify any scenic areas, vistas, or corridors in the vicinity of the campus (City of Huntington Beach 1996, 2001). The nearest scenic

vista is the Bolsa Chica Ecological Reserve, located approximately 2 miles southwest of the campus. Therefore, the project site is far enough away for implementation of the proposed project not to interfere with any associated vistas. There are no scenic vistas within the vicinity of the proposed project site; therefore, impacts would be less than significant. This topic will not be analyzed further in the PEIR.

b) Would the project substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Less Than Significant Impact. The proposed project involves the construction of a variety of structures on the GWC campus, some of which could obstruct views of the surrounding area. Construction activities, including grading and excavation, could have a temporary impact on views due to the presence and staging of equipment. However, the project would not have an impact on scenic resources associated with a state scenic highway. According to the California Department of Transportation (Caltrans), the nearest eligible scenic roadway is the beginning of State Route 55 (SR-55) to the Anaheim county line, which is approximately 9 miles from the project site at its closest point (Caltrans 2013). There are no designated scenic roadways within the project vicinity. There are no other scenic resources near or within the proposed project site that are visible from a scenic roadway. The proposed project would not damage scenic resources within a state scenic highway and impacts on scenic resources would be less than significant; therefore, no further analysis is required. This topic will not be analyzed further in the PEIR.

c) Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

Potentially Significant Impact. The proposed project entails implementation of the Vision Plan for the GWC campus. Implementation of the proposed project, because it introduces a wide variety of projects to the campus, could substantially impact the visual character and quality of the site and its surroundings. The focus of much of the proposed project is new and renovated buildings, which would be most visible to surrounding viewers. The District's intent is to construct and renovate facilities throughout the campus, create pedestrian walkways and roadways, and visually enhance entryways. These modifications would have visual impacts. The intent of these modifications would be to improve pedestrian and vehicular circulation, increase the amount of open space on campus, and create a cohesive physical image and clear entry pathways and signage. The visual character and quality of the project site would be enhanced through the construction of facilities with consistent architectural themes. The proposed project would possibly degrade the view for residences located to the north, west, and south. Impacts would be potentially significant and will be examined further in the PEIR.

d) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Potentially Significant Impact. New sources of light and glare could be introduced as a result of the proposed project. Additional exterior and interior lighting would likely be added upon the construction of new facilities. Windows and other reflective features associated with newly renovated and constructed facilities could also introduce glare to the project site and the surrounding areas. Although light and glare considerations would be factored into the proposed project design, further analysis is necessary to prevent light and glare from adversely affecting day or nighttime views in the area. Impacts would be potentially significant and will be analyzed further in the PEIR.

6.2 Agriculture and Forestry Resources

II. **AGRICULTURE AND FORESTRY RESOURCES** – In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
	Potentially Significant Impact	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

a) Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact. The proposed project would not convert Farmland to non-agricultural use. A parcel of Unique Farmland, located in Westminster, is located approximately 1 mile east of the campus. This long strip of Farmland crosses Interstate 405 and appears to contain greenhouses, row crops, and orchards. A parcel of land considered to be Prime Farmland is located approximately 2.5 miles northeast of the campus in Westminster and currently appears to be undeveloped (CDC 2011). The proposed project would not occur within these isolated Farmland locations, and would not result in the conversion of this land to non-agricultural use; therefore, no impact would occur. This issue will not be analyzed further in the PEIR.

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The Williamson Act, also known as the California Land Conversion Act of 1969 (California Government Code, Section 51200 et seq.), preserves agricultural and open space lands from the conversion to urban land uses by establishing a contract between local governments and private landowners to voluntarily restrict their land holdings to agricultural or open space use. The project site is not located on any lands with Williamson Act contracts (CDC 2004). The proposed project location is designated as Public–Semipublic land according to the City of Huntington Beach General Plan Zoning Map (2010b), and is therefore not zoned for agricultural use. The surrounding areas are designated as Residential Low Density, Residential Medium High Density, and Industrial General Specific Plan Designations and as Commercial General and Parks and Recreation Subdistrict land use types. None of these zones allow for agricultural uses; therefore, no conflict with agricultural zoning exists. According to the General Plan, a few areas within the City of Huntington Beach are considered Residential Agricultural land use type (2010b). The closest Residential Agricultural locations within the City of Huntington Beach are 2.2 miles southeast and 2.3 miles southwest of the campus. The southeast parcel appears to be occupied by a cemetery and the southwest parcel appears to be undeveloped. These parcels are not located within the immediate vicinity of the campus; therefore, the proposed project would have no impact on agriculturally zoned land. No further analysis is required and this topic will not be included in the PEIR.

c) Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact. No land within the City of Huntington Beach is zoned as forest land, timberland, or timberland zoned Timberland Production, according to the City of Huntington Beach General Plan (1996). Therefore, the proposed project site would not conflict with existing zoning or cause rezoning of any of any forest or timberland, as none of those land types are located within the vicinity of the project site; no impact would occur. No further analysis is required regarding this issue and it will not be included in the PEIR.

d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. The proposed project is located in an urban, developed area and is not located within or in the vicinity of forest land. The closest forests are the Cleveland National Forest (to the east of Orange County) and the Angeles National Forest (north of Los Angeles) (USFS 2013). There are no state forests within Orange County. The proposed project would not contribute to the loss of forestland; therefore, there would be no impact and this issue will not be included in the PEIR.

e) Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

No Impact. No Farmland or forest land exists within the vicinity of the proposed project site, as described in Sections 6.2(a) through 6.2(d). Therefore, no Farmland or forests would be converted for non-agricultural or non-forest use due to the proposed project. No impact on Farmland or forestland would occur due to the proposed project; therefore, no further analysis is required. This issue will not be included in the PEIR.

6.3 Air Quality

III. **AIR QUALITY** – Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
	Potentially Significant Impact	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Conflict with or obstruct implementation of the applicable air quality plan?	☒	☐	☐	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☒	☐	☐	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☒	☐	☐	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☒	☐	☐	☐
e) Create objectionable odors affecting a substantial number of people?	☒	☐	☐	☐

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

Potentially Significant Impact. The City of Huntington Beach is within the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The Air Quality Management Plan (AQMP) prepared by the SCAQMD incorporates planning projections to devise a plan to meet federal and state air quality requirements. The proposed project would increase air pollutants due to construction activities, and long-term increases would likely result from an increase in student enrollment. The increase in commuting students and visitors projected by the Vision Plan would likely result in an increase in vehicular pollutants, as well as pollutants associated with campus operations, compared to the current campus emission levels. Campus energy demands would likely increase due to expanded enrollment and the increased number of buildings on campus, contributing to an increase of greenhouse gas (GHG) emissions. These scenarios would introduce more air pollutants into the proposed project area and would potentially be in conflict with the AQMP, which would be considered a potentially significant impact. These issues will be analyzed further in the PEIR.

b) Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Potentially Significant Impact. The proposed project could violate an air quality standard or contribute substantially to an air quality violation. Construction of the proposed project would result in a temporary addition of pollutants to the local airshed caused by soil disturbance, dust emissions, and combustion pollutants from on-site construction equipment, as well as from construction worker vehicles, vendor/delivery trucks, and off-site haul trucks. Nitrogen oxide (NO_x) and carbon monoxide (CO) emissions would primarily result from the use of construction equipment and motor vehicles. Fugitive dust emissions would primarily result from trenching and grading activities. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and, for dust, the prevailing weather conditions.

Long-term air pollution could result from vehicular emissions and campus operations. The increase in student enrollment projected by the Vision Plan could contribute to additional NO_x and CO emissions. Campus energy demands would likely increase due to the development of the new buildings, contributing in an increase of GHG emissions, representing a potentially significant impact. In order to determine the proposed project's potential for violating any air quality standards, further analysis will be required and will be included in the PEIR.

c) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Potentially Significant Impact. The proposed project could result in a cumulatively considerable net increase of criteria pollutants that are in non-attainment under a federal or state standard. Criteria pollutants in non-attainment in the South Coast Air Basin include ozone (O_3) and particulate matter (PM_{10} and $PM_{2.5}$) (SCAQMD 2013). Ozone emitted from construction vehicles and commuter vehicles could contribute to long-term air quality impacts. Particulate matter emitted from construction activities could contribute to temporary impacts. Further investigation is required in order to determine the proposed project's potential to result in a considerable net increase of these criteria pollutants. . Impacts are potentially significant and these issues will be analyzed further in the PEIR.

d) Would the project expose sensitive receptors to substantial pollutant concentrations?

Potentially Significant Impact. Sensitive receptors include population groups susceptible to the effects of air pollutants. Sensitive receptors include the elderly, children, those with serious medical conditions, or any other group considered sensitive to the harmful effects of air pollutants. Sensitive receptors located within the vicinity of the campus include College View, Golden View, Sun View, Circle View, Westmont, and Schroeder Elementary Schools; Spring View Middle School; Marina and Ocean View High Schools; Garden Conservatory Preschool; Liberty Christian School; Land School; Memorial Care Medical Group; Memorial Promptcare Memorial; and surrounding residential neighborhoods. Substantial pollutant concentrations could be emitted as a result of project construction activities and campus operations. Further analysis is required regarding the amount of emitted pollutants and whether this would be considered substantial. Impacts ***would be*** potentially significant and this issue will be analyzed further in the PEIR.

e) Would the project create objectionable odors affecting a substantial number of people?

Potentially Significant Impact. It is possible that odors could be released during construction activities and while the new facilities are in operation. Preconstruction and construction activities include grading and painting, which could result in the temporary release of objectionable odors. While in operation, odors associated with waste and chemicals used for cleaning and facility maintenance could be released from the project site; impacts would be potentially significant. This issue will be analyzed further in the PEIR.

6.4 Biological Resources

Information in this section is based on a general reconnaissance biological survey conducted by Dudek biologist Johanna Page on August 6, 2013. A biological resources letter report will be prepared for the PEIR.

IV. BIOLOGICAL RESOURCES – Would the project:				
	Potentially Significant Impact	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☒	☐	☐	☐

IV. **BIOLOGICAL RESOURCES** – Would the project:				
	Potentially Significant Impact	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☒	☐	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Potentially Significant Impact. Cooper's hawk (*Accipiter cooperii*), a species on the California Watch List, has the potential to nest in tall ornamental trees within the proposed project site, according to a general reconnaissance biological survey conducted on the GWC campus. Monarch butterflies (*Dymasia dymas imperialis*; California Special Animal List) are known to overwinter within a small stand of ornamental trees (i.e., pines) at the central-eastern portion of the GWC campus (The Monarch Program 2013). A monarch butterfly was also sighted during the biological survey. The western yellow bat (*Lasiurus xanthinus*; California Species of Special Concern) has a moderate potential to occur on site. If trees were to be removed during proposed project activities, it could have a substantial adverse effect on all of the species described. Therefore, impacts would be potentially significant. Further analysis is required and will be included in the PEIR.

b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

No Impact. The proposed project site is composed of developed, disturbed, eucalyptus woodland, ruderal vegetation, and ornamental planting communities (which includes 1.46 acres of a native garden), according to a general reconnaissance biological survey conducted on the GWC campus (see Figure 8). These are not considered to be native plant communities. The project site is not located on riparian habitat or a sensitive natural community, and would not have an adverse effect on these habitats. Therefore, no impacts would occur and no further analysis is required. This topic will not be analyzed further in the PEIR.

c) Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact. According to a general reconnaissance biological survey conducted on the GWC campus, the proposed project site is composed of developed, disturbed, eucalyptus woodland, ornamental plantings, and ruderal vegetation communities (see Figure 8). No jurisdictional wetlands or non-wetland waters were found to occur within the proposed project site during the biological survey; therefore, no impacts would occur. This topic will not be analyzed further in the PEIR.

d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Potentially Significant Impact. The proposed project site contains stands of Australian eucalyptus trees and ornamental trees that provide overwintering sites for monarch butterflies and potentially serve as nesting sites for Copper's hawks and roosting sites for the western yellow bat, according to a general reconnaissance biological survey conducted on the GWC campus. Construction activities or removal of these trees as a result of the proposed project could create disturbances, interfere with wildlife movement, or impede the use of these habitats, causing a potentially significant impact. Further analysis is required and will be included in the PEIR.

e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less Than Significant Impact. Implementation of the proposed project could result in removal, planting, and/or maintenance of trees protected under the Huntington Beach Municipal Code. Chapter 13.50 of the City's Municipal Code provides the regulation for trees growing in public places (City of Huntington Beach 2002). As such, the District would coordinate with the City's Director of Public Works prior to planting, replanting, relocating, removing, spraying, and/or maintaining (e.g., pruning or fertilizing) any trees associated with the proposed project that reside in public places. Therefore, impacts would be less than significant, and no further analysis is required. This topic will not be analyzed in the PEIR.

f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. The proposed project is not located within any adopted habitat conservation plan, natural community conservation plan, or local or regional habitat conservation plan areas. Additionally, the proposed project is not located within any Non-Reserve Supplemental Habitat Special Linkages and/or Existing Use Areas identified within the Natural Community Conservation Plan and Habitat Conservation Plan for the County of Orange Central and Coastal Subregions (Central–Coastal NCCP/HCP) (County EMA 1996). Since the proposed project is not located within any approved plan areas, the project would not impact the goals and objectives of any adopted plans. Therefore, impacts would not occur, and no further analysis is required. This topic will not be analyzed in the PEIR.

6.5 Cultural Resources

V. CULTURAL RESOURCES – Would the project:				
	Potentially Significant Impact	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☒	☐	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☒	☐	☐	☐

V. **CULTURAL RESOURCES** – Would the project:				
	Potentially Significant Impact	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☒	☐	☐	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☒	☐	☐	☐

a) Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

Potentially Significant Impact. Renovations are planned for the Central Warehouse/ Corporation Yard, Automotive, Community Services, and Technology Buildings, and demolition is planned for the Cosmetology, Humanities, Health Science/Public Safety, Business/Social Science, Administration Building/Student Services, and Science/Math Buildings, and the Boyce Library, which were constructed more than 40 years ago. A historical resources survey will be performed to determine whether these or any other buildings or structures are considered historically significant as defined in Section 15064.5 of the CEQA Guidelines (14 CCR 15000 et seq.). Because impacts would be potentially significant, further analysis is required and will be included in the PEIR.

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Potentially Significant Impact. Excavation would occur to create foundations for new facilities. Archaeological resources could be adversely altered or damaged as a result of these activities. Therefore, impacts would be potentially significant and will be analyzed further in the PEIR.

c) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Potentially Significant Impact. Excavation and ground-disturbing activities associated with the construction of the proposed project could adversely alter geological features and paleontological resources, causing potentially significant impacts. A paleontological study will be required and will be included in the PEIR.

d) Would the project disturb any human remains, including those interred outside of formal cemeteries?

Potentially Significant Impact. Excavation would occur to create foundations for new facilities. Although it is unlikely due to previous ground disturbance, human remains could be located within the proposed project site and could be disturbed by these activities. This topic will be analyzed further in the PEIR, as potentially significant impacts could occur.

6.6 Geology and Soils

VI. GEOLOGY AND SOILS – Would the project:				
	Potentially Significant Impact	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☒	☐	☐	☐
ii) Strong seismic ground shaking?	☒	☐	☐	☐
iii) Seismic-related ground failure, including liquefaction?	☒	☐	☐	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☒	☐	☐	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☒	☐	☐	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☒	☐	☐	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

a) Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

Potentially Significant Impact. The proposed project could expose people or structures to the adverse effects of fault rupture. No active faults lie directly underneath the proposed project site and the proposed project is not located within an Alquist-Priolo Earthquake Fault Zone (CDC 1986). The nearest fault is the Newport–Inglewood Fault, located along the coastline of Huntington Beach 2 miles southwest of the campus. Also nearby is the Palos Verdes–Coronado Bank Fault, located 10 miles from the City center. Farther away are the Whittier and the Elsinore Fault Zones; the closest approaches of these faults are 19 and 28 miles from the City center, respectively (City of Huntington Beach 1996). Given the campus's proximity to the Newport–Inglewood fault zone, impacts associated with fault rupture would be potentially significant. This topic will be addressed in the PEIR.

ii) Strong seismic ground shaking?

Potentially Significant Impact. Given the campus's proximity to the Newport–Inglewood and Palos Verdes–Coronado Bank Faults and the Whittier and Elsinore Fault Zones, it would be vulnerable to the adverse effects of strong seismic ground shaking. These adverse effects would be minimized as building design and renovations would comply with the Division of the State Architect (DSA) requirements; the Huntington Beach Municipal Code, Title 17 (City of Huntington Beach 2013); and the State of California Uniform Building Code, as controlled by the permitting process. These codes impose design standards and requirements that seek to minimize the damage associated with seismic events. Further analysis is required to determine the potential impacts associated with a seismic event on the proposed project site. Impacts would be potentially significant and will be addressed in the PEIR.

iii) Seismic-related ground failure, including liquefaction?

Potentially Significant Impact. The proposed project would potentially expose people and structures to seismic ground failure, including liquefaction. Liquefaction occurs when partially saturated soil loses its effective stress and enters a liquid state, which can result in the soils inability to support structures above. Liquefaction can be induced by ground-shaking events and is dependent on soil saturation

conditions. According to the California Geological Survey, the project site is located within the Seal Beach 7.5-minute Quadrangle, a zone vulnerable to the effects of liquefaction (CDC 1998). Project design and construction would conform to the DSA requirements, the Huntington Beach Municipal Code (City of Huntington Beach 2013), and the Uniform Building Code. These codes abate the effects of seismic-related ground failure and liquefaction. However, the impacts associated with seismic-related ground failure would be potentially significant and further examination will be included in the PEIR.

iv) Landslides?

Less Than Significant Impact. The potential for a landslide event is very low, as the proposed project site and the surrounding area are flat. In general, the City of Huntington Beach is located on flat terrain, making the risks associated with landslides extremely low. According to the City of Huntington Beach General Plan (1996), the area most vulnerable to landslides would be in the vicinity of the bluffs located along the coast, more than 2 miles away from the proposed project site. Impacts associated with a landslide event would be considered less than significant, and no further analysis is required. This topic will not be included in the PEIR.

b) Would the project result in substantial soil erosion or the loss of topsoil?

Potentially Significant Impact. The proposed project could potentially induce soil erosion and loss of topsoil, as unearthed soil exposed through excavation and grading activities could be transported away through wind or water flow. Proposed project construction activities would comply with standards and requirements in order to obtain a Stormwater Construction Activities permit and a National Pollutant Discharge Elimination System (NPDES) permit from the Santa Ana Regional Water Quality Control Board (RWQCB). This requires that a stormwater pollution prevention program (SWPPP) be prepared and implemented in order to mitigate and minimize the effects of soil erosion and loss of topsoil. Further analysis is required to determine the impacts associated with the operation of the proposed project. Impacts would be potentially significant and will be analyzed further in the PEIR.

c) Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Potentially Significant Impact. The proposed project could be vulnerable to or result in on- or off-site lateral spreading, subsidence, liquefaction, or collapse. The majority of the project site would be located on Bolsa silt loam, drained, as well as Bolsa silty clay loam

and Bolsa silty clay loam, drained (see Figure 9). The project site could be vulnerable to the effects of lateral spreading, subsidence, liquefaction, or collapse. Project design and construction, however, would conform to Huntington Beach Municipal Code Title 17 and the State of California Uniform Building Code. These regulatory requirements include measures that would prevent and abate the effects of lateral spreading, subsidence, liquefaction, or collapse. However, impacts would be potentially significant and will be analyzed further in the PEIR.

d) Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Potentially Significant Impact. The proposed project could be vulnerable to the effects associated with expansive soil, as the project site is located on Bolsa Series soils, which have expansive properties (see Figure 9). The project would comply with the Uniform Building Code, which would minimize the risks to life and property in relation to expansive soils. However, impacts would be potentially significant, and will be analyzed further in the PEIR.

e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact. The proposed project does not include septic tanks or alternative waste water disposal systems; therefore, no impact would occur. This issue will not be analyzed further in the PEIR.

6.7 Greenhouse Gas Emissions

VII. GREENHOUSE GAS EMISSIONS – Would the project:				
	Potentially Significant Impact	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☒	☐	☐	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☒	☐	☐	☐

a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Potentially Significant Impact. Global climate change is a cumulative impact; a project has a potential impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs. Thus, GHG impacts are recognized as exclusively cumulative impacts: there are no non-cumulative GHG emission impacts from a climate change perspective (CAPCOA 2008). This approach is consistent with that recommended by the California Natural Resource Agency, which noted in its public notice for the proposed CEQA amendments that the evidence before it indicates that in most cases, the impact of GHG emissions should be considered in the context of a cumulative impact, rather than a project-level impact (CNRA 2009a). Similarly, the Final Statement of Reasons for Regulatory Action for amendments to the CEQA Guidelines confirms that an EIR or other environmental document must analyze the incremental contribution of a project to GHG levels and determine whether those emissions are cumulatively considerable (CNRA 2009b).

The proposed project would result in the emission of GHGs. Temporary impacts would result from the operation of construction vehicles and equipment. The operation of new on-campus facilities would increase campus energy demand and therefore would result in the ongoing emission of GHGs. Further analysis is required to determine the estimated project-generated GHG emissions and their impact on global climate. Impacts would be potentially significant and discussion of this topic will be included in the PEIR.

b) Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Potentially Significant Impact. There are several federal and state regulatory measures aimed at the identification and reduction of GHG emissions; most of these measures focus on area source emissions (e.g., energy usage) and changes to the vehicle fleet (incorporating hybrid, electric, and more fuel-efficient vehicles). The Global Warming Solutions Act (Assembly Bill (AB) 32) prepared a scoping plan and established regulations to reduce California GHG emission levels to 427 million metric tons of carbon dioxide equivalent (CARB 2006). Further analysis is required to determine estimated project-generated GHG emissions, and their relationship to AB 32 and other applicable plans and policies. Impacts would be potentially significant and discussion of this topic will be included in the PEIR.

6.8 Hazards and Hazardous Materials

VIII. HAZARDS AND HAZARDOUS MATERIALS – Would the project:				
	Potentially Significant Impact	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☒	☐	☐	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☒	☐	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☒	☐	☐	☐
d) Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☒	☐	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☒	☐
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☒	☐	☐	☐
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒	☐

a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Potentially Significant Impact. The District Environmental Health and Safety Department (EHS) manages health and safety through the development and execution of its programs and policies. The EHS is responsible for ensuring that the transportation, use, and disposal of hazardous materials is conducted safely throughout all of its

campuses. Hazardous materials would be used during maintenance and construction processes; these materials might include fuels, lubricating fluids, solvents, and cleaning products. If these materials are released, they could prove to be hazardous; therefore, the EHS would be responsible for implementing their programs to prevent any risks involved with handling these materials.

The proposed project involves the construction, renovation, and demolition of several buildings. Some of the older buildings that are proposed for renovation have a risk of containing lead and asbestos, as their construction predated regulation of these materials. Although it is not known whether the existing buildings contain these materials, precautions must be taken during the renovation process. Other pollutants or materials could also be released during renovations. The SCAQMD and the local California Occupational Safety and Health Administration office would be notified of the proposed construction, renovation, and demolition plans before prior to their execution.

The proposed project involves the demolition of the Math/Science Building. Hazardous materials used for laboratory purposes would be transported, stored, and disposed of during the proposed demolition and later during facility operation. The types of materials, their amount, and their concentration are not known at this point; however, the transport, use, and disposal of hazardous materials could cause potentially significant impacts and will be analyzed further in the PEIR.

b) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Potentially Significant Impact. As discussed in Section 6.8(a), the proposed project would potentially create a significant hazard to the public through the release of hazardous materials into the environment. Therefore, impacts would be considered potentially significant and will be analyzed further in the PEIR.

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Potentially Significant Impact. As discussed in Section 6.8(a), the proposed project could emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste. This is especially a risk as the proposed project is within 0.25 mile of Land School. Impacts would be considered potentially significant and this issue will be analyzed further in the PEIR.

d) Would the project be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Potentially Significant Impact. The proposed project site could be included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 (DTSC 2013). The Department of Toxic Substances Control is responsible for this list, which includes hazardous waste facilities known to have an unauthorized release of hazardous materials, hazardous waste facilities subject to corrective action, and sites known to have been used for authorized or unauthorized solid waste disposal. The presence of the project site on this list could be an indication of potentially significant impacts. A hazardous materials site search will be conducted and this issue will be analyzed further in the PEIR.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

Less Than Significant Impact. The Airport Land Use Commission (ALUC) for Orange County has adopted the Airport Environs Land Use Plan. The project site is located approximately 8 miles northwest of John Wayne International Airport. Proposed project activities would not pose a hazard for people residing or working in the project area. The proposed project includes the construction of several multistory buildings. Although the height of these proposed buildings is not yet known, if they are designed to exceed 200 feet (approximately 10 stories), then the Federal Aviation Administration (FAA) will be notified (ALUC 2008). Impacts would be less than significant and no further analysis on this issue is required. This topic will not be analyzed in the PEIR.

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

No Impact. The proposed project is not located within the vicinity of a private airstrip. No private airstrips exist within 2 miles of the proposed project site; therefore, there would be no impact and this issue will not be analyzed further in the PEIR.

g) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Potentially Significant Impact. The Huntington Beach Fire Department and the DSA would review all proposed project designs. An access compliance review and fire and life safety review would be performed to prevent impairment of or physical interference with an adopted emergency response plan or emergency evacuation plan. However, it is not

known whether the proposed project would interfere with an adopted emergency response plan or emergency evacuation plan; further analysis is required. Impacts would be potentially significant and will be analyzed further in the PEIR.

h) Would the project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

Less Than Significant Impact. It is unlikely that the project would expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands. The proposed project is in an urbanized area with no adjacent wildlands. The area surrounding the project site is generally urbanized and developed. Therefore, impacts would be considered less than significant and no further analysis is required. This topic will not be analyzed in the PEIR.

6.9 Hydrology and Water Quality

IX. HYDROLOGY AND WATER QUALITY – Would the project:				
	Potentially Significant Impact	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Violate any water quality standards or waste discharge requirements?	☒	☐	☐	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☒	☐	☐	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☒	☐	☐	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☒	☐	☐	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☒	☐	☐	☐

IX. HYDROLOGY AND WATER QUALITY – Would the project:					
		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
f)	Otherwise substantially degrade water quality?	☒	☐	☐	☐
g)	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h)	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☒	☐
j)	Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

a) Would the project violate any water quality standards or waste discharge requirements?

Potentially Significant Impact. Water quality could be adversely affected by stormwater runoff from the proposed project site. Pollutants on campus come from campus operations and vehicle usage and maintenance, construction, and landscaping activities. These pollutants include fuel, oil, fertilizers, paints, solvents, cleaners, loose soil, and trash. The nearest water bodies include the Pacific Ocean, which is approximately 3.4 miles southwest of campus, and the Bolsa Chica wetlands estuary, approximately 2.7 miles southwest of campus. Storm events could carry pollutants to these bodies of water.

The proposed project would comply with standards and requirements in order to obtain a Stormwater Construction Activities permit and an NPDES permit from the Santa Ana RWQCB. This requires that a SWPPP be prepared and implemented to mitigate and minimize the effects of soil erosion and loss of topsoil. The SWPPP would also contain measures that would require the proper handling, storage, and disposal of hazardous materials, preventing their release into the surrounding environment. The SWPPP would be implemented during the construction of the proposed project; however, impacts associated with campus operations need to be examined further. Analysis is required to determine whether water quality standards or waste discharge requirements could be violated by operation of the project. Impacts would be considered potentially significant and will be analyzed further in the PEIR.

b) Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (i.e., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?

Potentially Significant Impact. Groundwater is supplied from 10 active wells located within the City. These wells access the Orange County Groundwater Basin, which is managed by the Orange County Water District (City of Huntington Beach 2010c). Water would be required for construction and renovation activities, including dust abatement during grading, cement mixing, and cleaning. Water is also needed for campus operations, including landscape maintenance and cleaning, and would need to be provided for students and employees. It is unknown whether the proposed project would substantially deplete groundwater supplies; therefore, further analysis is required to determine the projected water demands associated with construction and operation activities. Impacts would be considered potentially significant and will be analyzed further in the PEIR.

c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

Potentially Significant Impact. The proposed project could alter the drainage pattern of the campus, and may result in substantial erosion or siltation on or off site. A SWPPP would be prepared that would include measures to prevent substantial erosion or siltation during construction activities. However, further analysis is required to determine the impacts associated with campus operations. The proposed project would not alter the course of a stream or river, as none of these exists in the vicinity of the campus. Impacts would be potentially significant and will be analyzed further in the PEIR.

d) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Potentially Significant Impact. The project would alter the existing drainage pattern of the site and could increase the rate or amount of surface runoff. The site would introduce new impervious surface area to the project site; however, the site is already developed and contains both impervious surfaces and permeable surfaces (grass fields). Further analysis is

required to determine the risk of on- or off-site flooding associated with the proposed project. Impacts would be potentially significant and will be analyzed further in the PEIR.

e) Would the project create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Potentially Significant Impact. As discussed in Section 6.9(d), new impervious surfaces would be introduced by the proposed project; however, further analysis is required to determine whether there would be a contribution to runoff exceeding the capacity of existing or planned stormwater drainage systems. A standard urban stormwater mitigation plan would be prepared by the District that would require that water runoff undergo treatment to improve water quality. Impacts would be potentially significant and will be analyzed further in the PEIR.

f) Would the project otherwise substantially degrade water quality?

Potentially Significant Impact. Due to the introduction of pollutants from construction vehicles, maintenance, and construction activities, the water quality of stormwater runoff would be degraded. As mentioned in Section 6.9(a), a SWPPP would be developed and implemented to mitigate the effects of construction activities on stormwater runoff water quality. However, further analysis is required to determine campus operation impacts on water quality. Impacts would potentially be significant and will be analyzed in the PEIR.

g) Would the project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

No Impact. According to the FEMA Flood Insurance Rate Map, the proposed project site is not located within a 100-year flood hazard area (FEMA 2009a, 2009b, 2009c). Areas immediately surrounding the campus are in a 100-year flood zone. However, the proposed project would not locate housing in one of these areas. Impacts would not occur and no further analysis is required. This topic will not be analyzed in the PEIR.

h) Would the project place within a 100-year flood hazard area structures which would impede or redirect flood flows?

No Impact. According to the FEMA Flood Insurance Rate Map, the proposed project site is not located within a 100-year flood hazard area (FEMA 2009a, 2009b, 2009c). Therefore, the proposed project would not place structures that would impede or redirect

flood flows in a 100-year flood hazard area. Impacts would not occur and no further analysis is required. This topic will not be analyzed in the PEIR.

i) Would the project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

Less Than Significant Impact. The Prado Dam is located more than 20 miles northeast of the campus. The Seven Oaks dam is located 40 miles from the Prado Dam, upstream on the Santa Ana River. The dams were designed to work together to control flow into the Santa Ana River channel and prevent flooding into Orange County. The Santa Ana River crosses through Huntington Beach and Costa Mesa and is confined by a levee located approximately 0.75 mile south of the campus. The Prado Dam, Seven Oaks Dam, and improvements to the Lower Santa Ana River channel as well as other features of the Santa Ana River Project were designed to prevent flooding of the Lower Santa Ana River levees (OC Flood n.d.). Flooding due to levee or dam failure is therefore unlikely. Impacts would be less than significant and no further analysis is required. This topic will not be analyzed in the PEIR.

j) Inundation by seiche, tsunami, or mudflow?

No Impact. The project site is not at risk for inundation by seiche, tsunami, or mudflow. No large bodies of water exist in Huntington Beach; therefore, there are no risks of inundation by seiche. Because the project site and surrounding areas are flat, it is unlikely that inundation by mudflow would occur. The project site is approximately 3.4 miles northeast of the Pacific Ocean and would not be at risk for inundation by a tsunami. No further analysis is required, as no impacts would occur. This topic will not be analyzed in the PEIR.

6.10 Land Use and Planning

X. LAND USE AND PLANNING – Would the project:				
	Potentially Significant Impact	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Physically divide an established community?	☐	☐	☒	☐
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

a) Would the project physically divide an established community?

Less Than Significant Impact. The campus does not currently divide or isolate an established community. This site is surrounded by commercial centers, including the Bella Terra shopping center, religious facilities, parks, and residential developments. Proposed project activities would occur on campus and would not physically divide an established community. Impacts would be less than significant and no further analysis is required. This topic will not be analyzed in the PEIR.

b) Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

Less Than Significant Impact. The proposed project would not conflict with any land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental impact. The proposed project is compatible with the goals and regulations established by the City of Huntington Beach General Plan, including Zoning Regulations and the Land Use Element (City of Huntington Beach 2010b, 1996). The proposed project would also conform to the Uniform Building Code and the Huntington Beach Municipal Code (City of Huntington Beach 2013). Impacts would be less than significant and no further analysis is required. This topic will not be analyzed in the PEIR.

c) Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?

No Impact. The proposed project is not located within any adopted habitat conservation plan, natural community conservation plan, or local or regional habitat conservation plan areas. Additionally, the proposed project is not located within any Non-Reserve Supplemental Habitat Special Linkages and/or Existing Use Areas identified within the Central–Coastal NCCP/HCP (County EMA 1996). Since the proposed project is not located within any approved plan areas, the proposed project would not impact the goals and objectives of any adopted plans. Therefore, impacts would not occur and no further analysis is required. This topic will not be analyzed in the PEIR.

6.11 Mineral Resources

XI. MINERAL RESOURCES – Would the project:				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact. The City of Huntington Beach General Plan identifies oil and gas, sand and gravel, and peat as mineral resources that have been or are currently extracted at sites within the City. Although peat mining is no longer in operation in Huntington Beach, sand, gravel, and oil mining are still in production. Oil and gas mining operations occur along the coastal regions and mesas within the city (City of Huntington Beach 1996). The project site is located 3.4 miles from the coast and is not within the vicinity of oil and gas extraction areas. The project site is not located on a known sand and gravel extraction site. The proposed project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. Therefore, impacts would not occur and no further analysis is required. This topic will not be analyzed in the PEIR.

b) Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

No Impact. As described in Section 6.11(a), the proposed project would not occur on a mineral resource recovery site. According to the City of Huntington Beach General Plan Map, the project site is designated as a public school and not as a mineral resource recovery site (City of Huntington Beach 2010a). Therefore, no impacts would occur and no further analysis is required. This topic will not be analyzed in the PEIR.

6.12 Noise

XII. NOISE – Would the project result in:				
	Potentially Significant Impact	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☒	☐	☐	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☒	☐	☐	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☒	☐	☐	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☒	☐	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

a) Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Potentially Significant Impact. The proposed project could expose persons to a noise level in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Excessive noise could result from construction activities and the operation of construction vehicles. Huntington Beach Municipal Code establishes exterior noise levels standards to 55 A-weighted decibels (dBA) from 7 a.m. to 10 p.m. and 50 dBA from 10 p.m. to 7 a.m. in all residential areas. Exterior noise level standards are 55 dBA, 60 dBA, and 70 dBA at any time for professional office and public institutional properties, commercial properties, and industrial properties. The City prohibits noise levels from exceeding these standards for a cumulative period of more than 30 minutes in any hour. In addition, noise levels cannot exceed these standards plus 5 dBA for a cumulative period of 15 minutes in any hour, 10 dBA for a cumulative period of 5 minutes in any hour, 15 dBA for a cumulative period of 1 minute in any hour,

or 20 dBA for any period of time. However, construction activities are exempt from these restrictions when a permit has been obtained from the City (City of Huntington Beach 2012). Although construction activities could be exempt from these restrictions, campus operations could exceed these standards; therefore, impacts would be potentially significant. This issue will be analyzed further in the PEIR.

b) Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Potentially Significant Impact. Construction activities could expose persons to or generate excessive ground-borne vibration or ground-borne noise levels. Although there are no vibration thresholds set by the City of Huntington Beach (City of Huntington Beach 2012), construction activities could expose nearby residences, commercial centers, religious facilities, and parks to excessive ground-borne vibrations and noise. Impacts would be potentially significant and this issue will be analyzed further in the PEIR.

c) Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Potentially Significant Impact. The proposed project could result in a substantial permanent increase in ambient noise levels, due to noise generated within the school (machinery, sporting events, music events, etc.) and traffic noise. Impacts would be potentially significant and this topic will be analyzed further in the PEIR.

d) Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Potentially Significant Impact. The proposed project could result in a substantial temporary or periodic increase in ambient noise levels due to construction activities, grading and demolition, and traffic associated with construction vehicles. Impacts would be potentially significant and this issue will be analyzed further in the PEIR.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. Although Orange County has adopted the Airport Environs Land Use Plan, the proposed project site is located approximately 8 miles northwest of John Wayne International Airport. This airport is not within the vicinity of the project site; therefore, the project would not expose people to excessive noise levels. No impacts would occur and no further analysis is required. This topic will not be analyzed in the PEIR.

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The proposed project is not located within the vicinity of a private airstrip. No private airstrips exist within 2 miles of the proposed project site. People residing or working in the proposed project area would not be exposed to excessive noise levels from a private airstrip. No impacts would occur and no further analysis is required. This topic will not be analyzed in the PEIR.

6.13 Population and Housing

XIII. POPULATION AND HOUSING – Would the project:				
	Potentially Significant Impact	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☒	☐	☐	☐
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

a) Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Potentially Significant Impact. The proposed project includes the construction of a housing/mixed-use development, which could include retail/housing facilities. The District would like to increase entrepreneurial activities and attract visitors to the campus through the construction of Boys and Girls Club gymnasium facilities and through the renovation of the athletic facilities, theater, and amphitheater. These project elements could induce substantial population growth in the area, resulting in potentially significant impacts. Further analysis will be included in the PEIR.

b) Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

No Impact. The proposed project would not displace existing housing. Plans are to renovate and construct educational facilities, parking lots and structures, and non-

educational facilities serving students and the surrounding community. No housing units currently exist on the campus; however, the construction of housing facilities is proposed by the District. No impact would occur and no further analysis is required. This topic will not be analyzed in the PEIR.

c) Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No Impact. The proposed project would not displace substantial numbers of people. There are no plans to move any facilities that would result in the displacement of people from the project area. No impact would occur and no further analysis is required. This topic will not be analyzed in the PEIR.

6.14 Public Services

XIV. PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
	Potentially Significant Impact	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
Fire protection?	☒	☐	☐	☐
Police protection?	☒	☐	☐	☐
Schools?	☒	☐	☐	☐
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

Fire protection?

Potentially Significant Impact. The proposed project could have an adverse impact on fire protection providers. The nearest fire station is Murdy Fire Station No. 1, located 0.4 mile south of the project site at 16221 Gothard Avenue in the City of Huntington Beach. This station would be the primary responder for GWC. As the proposed project could include the development of new campus housing facilities and an increase in student

enrollment is anticipated as part of the Vision Plan, the area would experience an increase in the local population, which could affect the service ratio, response time, or other performance objectives of fire protection services. Renovated and newly constructed facilities would conform to the Uniform Building and Fire Code, which would impose design standards and requirements that seek to minimize and mitigate fire risk. Impacts would be potentially significant; therefore, further analysis on this issue is required and this topic will be addressed in the PEIR.

Police protection?

Potentially Significant Impact. The proposed project may have an adverse impact on police protection services. The nearest police station is the Huntington Beach Police Department, located 4 miles south of the project site at 2000 Main Street in Huntington Beach. The proposed project could include the development of new campus housing facilities; the area would experience an increase in the local population that could affect the service ratio, response time, or other performance objectives of police protection services. Impacts would be potentially significant; therefore, further analysis on this issue is required and this topic will be addressed in the PEIR.

Schools?

Potentially Significant Impact. The proposed project would include the development of housing facilities, and as a result of the projected increased student enrollment, more staff and professors may be needed to meet the increased enrollment at the campus. Therefore, there could be a need for new K–12 schools. Impacts would be potentially significant and this issue will be analyzed further in the PEIR.

Parks?

No Impact. The proposed project would have no impact on local parks. The proposed project area would experience an increase in population; however, the campus offers athletic fields and recreational opportunities to serve students and the community so nearby parks would not experience a significant increase in visitors and acceptable service ratios would be maintained. There are several parks in the vicinity of the project site. The closest parks are Greer Park, located across the intersection of McFadden Avenue and Goldenwest Street northwest of the campus, and College Park, located across the intersection of McFadden Avenue and Gothard Street northeast of the campus. Access to these parks would not be adversely affected by project construction activities as a traffic control plan would be implemented in compliance with state and municipal construction codes in order to prevent access issues. No impacts would occur and no further analysis is required. This topic will not be analyzed in the PEIR.

Other public facilities?

No Impact. The project would have no impact on libraries and other public facilities. GWC has a library on campus to serve the students; therefore, any increase in student enrollment would not adversely affect local libraries and acceptable service ratios would be maintained. The nearest public library is the Helen Murphy Branch Library, which is located approximately 1.5 miles west of campus. No impacts would occur and no further analysis is required. This topic will not be analyzed in the PEIR.

6.15 Recreation

XV. RECREATION				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

No Impact. The proposed project would not increase the use of existing parks or recreation areas. Although the campus is projected to have an increase in student enrollment, recreational facilities are available on the campus. Off-site recreational facilities would not experience substantial physical deterioration due to an increase of use. No impacts would occur and no further analysis is required. This topic will not be analyzed in the PEIR.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

No Impact. As discussed in Section 6.15(a), the proposed project would not increase the use of existing parks or recreation areas outside of the campus. Therefore, the expansion or addition of recreational facilities or parks is not required. Recreational facilities on campus do not require expansion and would be sufficient to serve the needs of students

and residents living on campus. No impacts would occur and no further analysis is required. This topic will not be analyzed in the PEIR.

6.16 Transportation and Traffic

XVI. TRANSPORTATION/TRAFFIC – Would the project:				
	Potentially Significant Impact	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☒	☐	☐	☐
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☒	☐	☐	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☒	☐	☐	☐
e) Result in inadequate emergency access?	☒	☐	☐	☐
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☒	☐	☐	☐

a) Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Potentially Significant Impact. The proposed project could conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system. Applicable plans include the Circulation Element of the City of

Huntington Beach General Plan (1996). The proposed project has the potential to impact the streets immediately surrounding the campus, which include McFadden Avenue, Gothard Street, Edinger Avenue, and Goldenwest Street. The Vision Plan projects an increase in student enrollment, and various projects, such as the Boys and Girls Club gymnasium facilities and the housing/mixed-use development, would attract members of the community to the campus, resulting in an increase in traffic. Impacts would be considered potentially significant. A traffic impact analysis will be conducted and the results included in the PEIR.

b) Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Potentially Significant Impact. The proposed project could conflict with the Orange County Congestion Management Program (CMP). As described in Section 6.16(a), conflicts could occur due to an increase in student enrollment and campus visitors. The CMP requires that intersections not fall below a level of service (LOS) score of "E" (OCTA 2011). It is unknown whether the project would conflict with LOS standards or any other standards set by the CMP, which would constitute a potentially significant impact. A traffic impact analysis will be conducted and the results included in the PEIR.

c) Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

No Impact. The proposed project site is not located within the vicinity of an airport or private airstrip. The nearest airport is John Wayne International Airport, located 8 miles southeast of the proposed project site. No private airstrips exist within 2 miles of the proposed project site. Air traffic patterns would not be affected by the proposed project and no impact would occur. This issue will not be analyzed further in the PEIR.

d) Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Potentially Significant Impact. The proposed project could increase hazards due to a design feature or incompatible uses. The proposed project would improve parking lot entryways, on-campus circulation, and service access roads. These project elements could introduce hazardous circulation or design features, causing a potentially significant impact; further analysis is needed to determine the risk associated with the proposed project design. A traffic impact analysis will be conducted and the results included in the PEIR.

e) Would the project result in inadequate emergency access?

Potentially Significant Impact. The proposed project could result in inadequate emergency access. The proposed project circulation improvements would have to be designed so as not to inhibit emergency access to the campus or any surrounding areas. The parking, circulation, and access road improvements described in Section 6.16(d), as well as all other project renovations and construction, would comply with the Uniform Building Code. The Huntington Beach Fire Department and the DSA would review all project designs. However, a traffic impact analysis is required to determine whether project design would impact emergency access. Impacts would be potentially significant and this topic will be analyzed further in the PEIR.

f) Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Potentially Significant Impact. The proposed project could conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities in the Circulation Element of the City of Huntington Beach General Plan or the Orange County CMP (City of Huntington Beach 1996). A traffic impact analysis is required to determine whether the proposed project would conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities. Impacts would be potentially significant and this topic will be analyzed further in the PEIR.

6.17 Utilities and Service Systems

XVII.UTILITIES AND SERVICE SYSTEMS – Would the project:				
	Potentially Significant Impact	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☒	☐	☐	☐
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☒	☐	☐	☐
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☒	☐	☐	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☒	☐	☐	☐

XVII. UTILITIES AND SERVICE SYSTEMS – Would the project:				
	Potentially Significant Impact	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
e) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☒	☐	☐	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☒	☐	☐	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☒	☐	☐	☐

a) Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Potentially Significant Impact. An increase in student enrollment has been projected by the District, which is stimulating the need for new and upgraded buildings and mixed-use and residential opportunities on the campus. These new buildings would result in an increase in wastewater discharge from the project site. Further investigation is required to determine whether wastewater treatment would exceed the requirements of the Santa Ana RWQCB, which would be a potentially significant impact. This topic will be analyzed further in the PEIR.

b) Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Potentially Significant Impact. The proposed project could require the construction of new water or wastewater treatment facilities or expansion of existing facilities, as the proposed project is in response to a projected increase in student enrollment. Further analysis will be conducted to determine the projected water demand and whether this demand would require the construction of additional water and wastewater facilities. Impacts would be considered potentially significant and this issue will be addressed in the PEIR.

c) Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Potentially Significant Impact. The proposed project could require the construction of new stormwater drains and infrastructure to support the newly constructed and renovated

buildings and structures. Drains and infrastructure would be designed to carry stormwater flow to existing stormwater drainage facilities. Although there would not be a significant increase in impervious surfaces due to the project, further analysis is needed to determine whether additional stormwater flow would result from the proposed project. Impacts would be potentially significant and this topic will be analyzed further in the PEIR.

d) Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Potentially Significant Impact. The proposed project includes the development of new facilities in response to a projected increase in student enrollment, which would result in an increase in water demand. The construction of a housing/mixed-use development unit would increase current campus water demands; however, projected water usage is not yet known. Further analysis is required to determine the expected water demands and whether current water supplies are sufficient or whether new or expanded entitlements would be needed. Impacts would be potentially significant and this topic will be analyzed further in the PEIR.

e) Would the project result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Potentially Significant Impact. As described in Section 6.17(a), the proposed project would accommodate an increase in student enrollment. It is possible that the project could create a demand that would exceed the wastewater treatment capacity of the area, in which case impacts would be potentially significant. Further analysis is required and this topic will be addressed in the PEIR.

f) Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Potentially Significant Impact. The Frank R. Bowerman Landfill in Irvine serves the City of Huntington Beach, including the GWC campus. This landfill permits a maximum of 11,500 tons of waste a day (OC Waste & Recycling 2013). The proposed project includes the construction of new facilities, including a housing development. Further analysis is required to determine the increase in solid waste generated by GWC, and whether this would exceed the capacity at the Frank R. Bowerman Landfill. Impacts would be potentially significant and this issue will be addressed in the PEIR.

g) Would the project comply with federal, state, and local statutes and regulations related to solid waste?

Potentially Significant Impact. AB 939 requires that at least 50% of solid waste generated by a state jurisdiction be diverted from landfill disposal through source

reduction, recycling, or composting. Cities, counties, and regional agencies are required to develop a waste management plan that would achieve a 50% diversion from landfills (California Public Resources Code, Section 40000 et seq.). Further investigation is required to confirm that the proposed project would comply with AB 939. Impacts would be potentially significant and this topic will be analyzed in the PEIR.

6.18 Mandatory Findings of Significance

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☒	☐	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☒	☐	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☒	☐	☐	☐

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?

Potentially Significant Impact. As discussed above in Section 6.4, Biological Resources, the proposed project would have the potential to impact fish or wildlife species and plant communities. As discussed in Section 6.5, Cultural Resources, proposed construction activities could impact examples of the major periods of California history or prehistory

if archaeological, paleontological, or historical resources were impacted. These issues will be analyzed further in the PEIR.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Potentially Significant Impact. The proposed project could have impacts that are individually limited, but cumulatively considerable. The PEIR will analyze past, present, and reasonably foreseeable projects in the vicinity of the proposed project.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Potentially Significant Impact. The proposed project could have environmental effects that would cause substantial adverse effects on human beings. This topic will be analyzed further in the PEIR.

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7.2 List of Preparers

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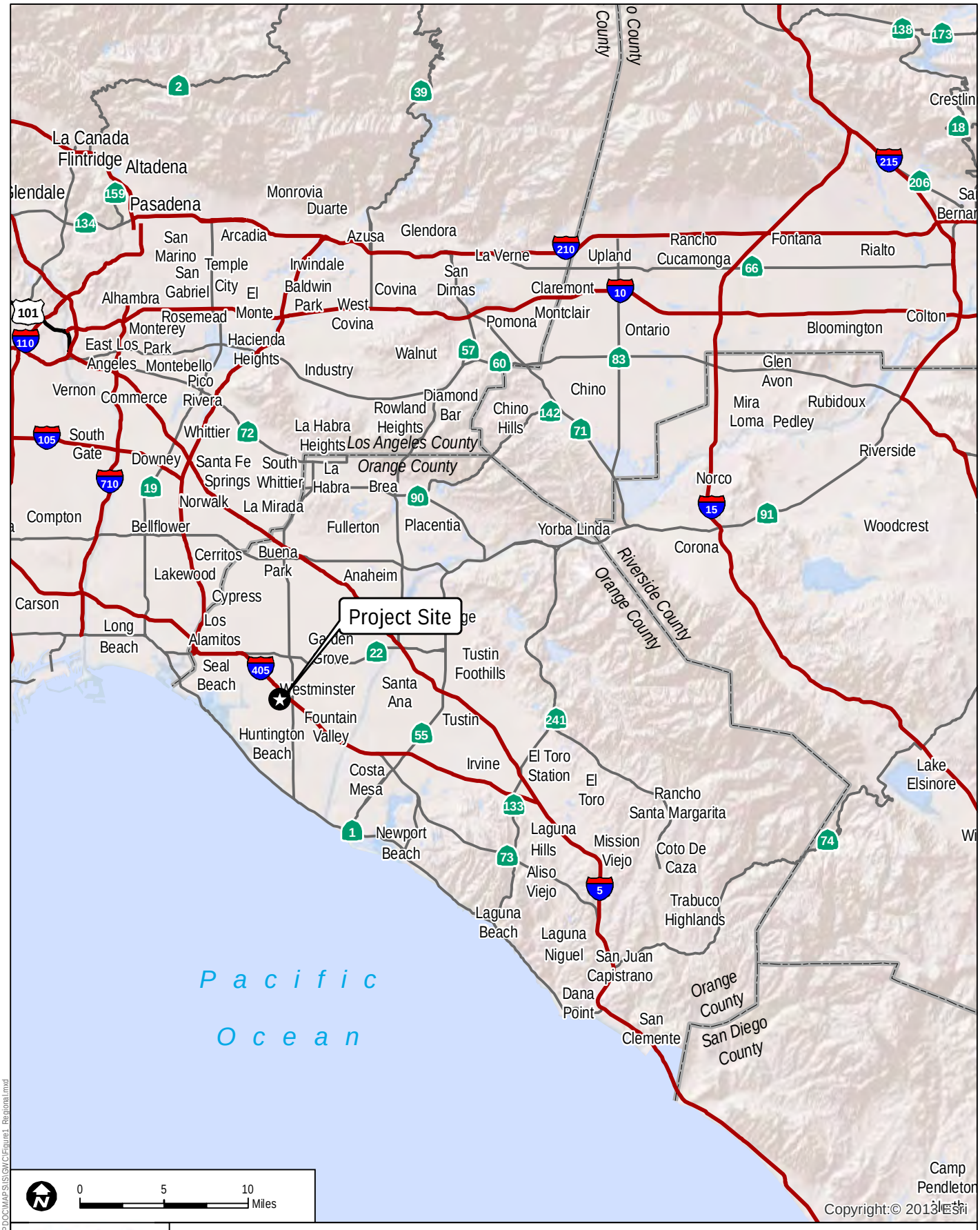

SOURCE: ESRI 2013

FIGURE 1

Regional Location

GOLDEN WEST COLLEGE VISION 2020 FACILITIES MASTER PLAN INITIAL STUDY

7910.0001

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SOURCE: ESRI 2013, Coast Community College Vision Plan 2012, SCAG 2008

FIGURE 2

Local Vicinity

7910,0001

GOLDEN WEST COLLEGE VISION 2020 FACILITIES MASTER PLAN INITIAL STUDY

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Golden West College

Campus Land Uses

1. CVS Pharmacy
2a. LRC
2b. Media Center
3. Frank M. and Gertrude R. Doyle School of Nursing and Health Services
4. Daycare Facility
5. Central Plant
6. Retail Center
7. Public Transit Stop
8. Future Residential Retail Neighborhood
9. Tennis Courts
10. Automotive Building
11. Math/Science Building
12. Health Science/Public Safety
13. Technology Support Services and Graphics Center Copy Room
14. Auto Body and Design
15. Child Care Center
16. Physical Education Complex
17. Technology Building
18. Physical Education Training and Rehab Center
19. Student Center
20. Bookstore
21. Humanities Building
22. Forum I
23a. Business Building
23b. Student Services and Admissions
24. Criminal Justice Training Center and Police Academy
25. Administration Building and Force Option Simulation Lab
26. Physical Education Outdoor Labs
27a. Cosmetology
27b. New Media Center Distance Learning
28. Student Services and Boyce Library
29a. Fine Arts
29b. KOCE Building and Accessibility Center for Education
30a. Forum II
30b. Music Building
31. Theatre
32. Communications Building and Stage West
33. Counseling Division
34. California Native Garden

SOURCE: ESRI 2013, Coast Community College Vision Plan 2012

7910.0001

FIGURE 3

Existing Campus Land Uses

GOLDEN WEST COLLEGE VISION 2020 FACILITIES MASTER PLAN INITIAL STUDY

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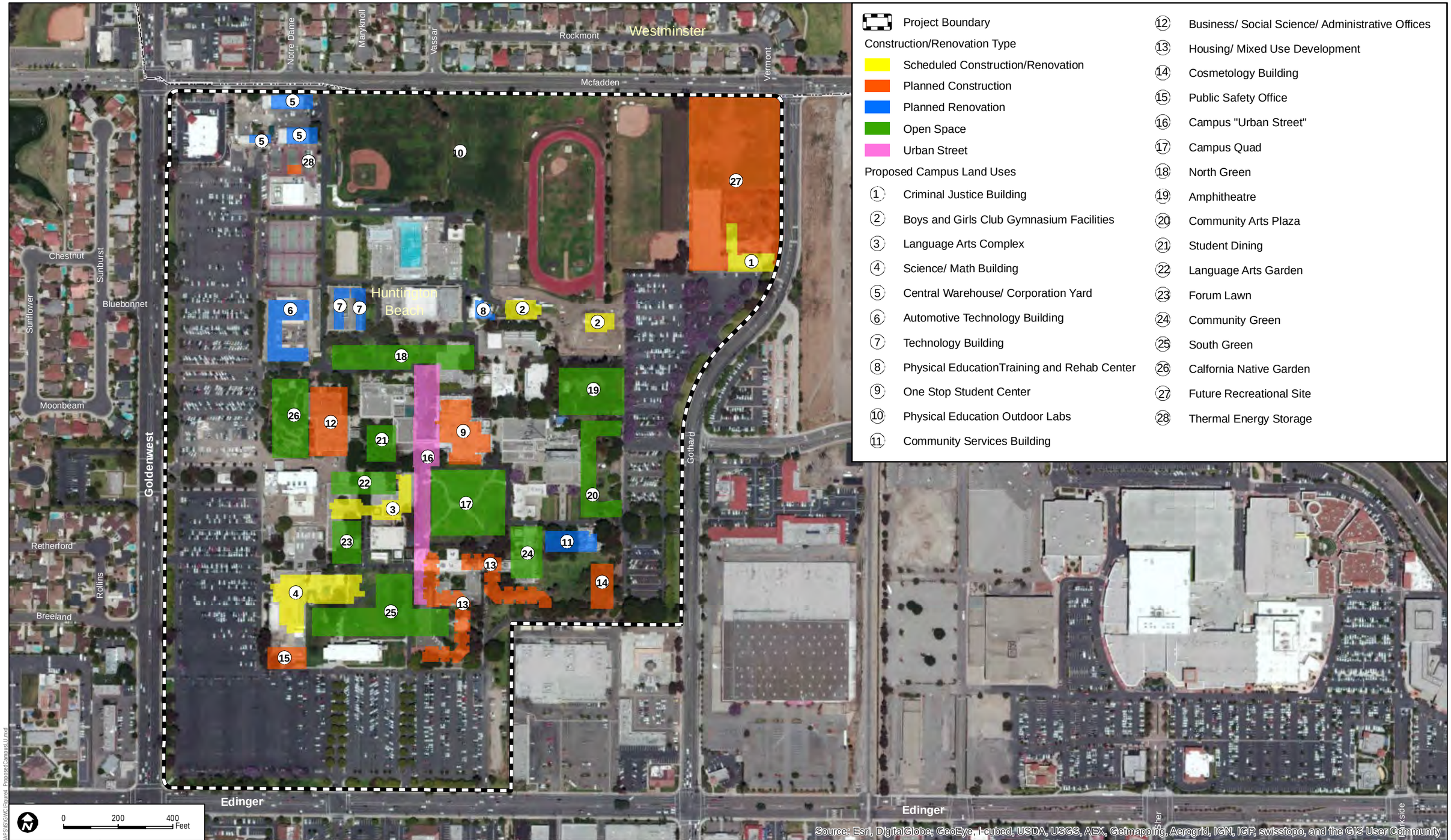

SOURCE: ESRI 2013, Coast Community College Vision Plan 2012

FIGURE 4

Proposed Campus Land Uses

7910.0001

GOLDEN WEST COLLEGE VISION 2020 FACILITIES MASTER PLAN INITIAL STUDY

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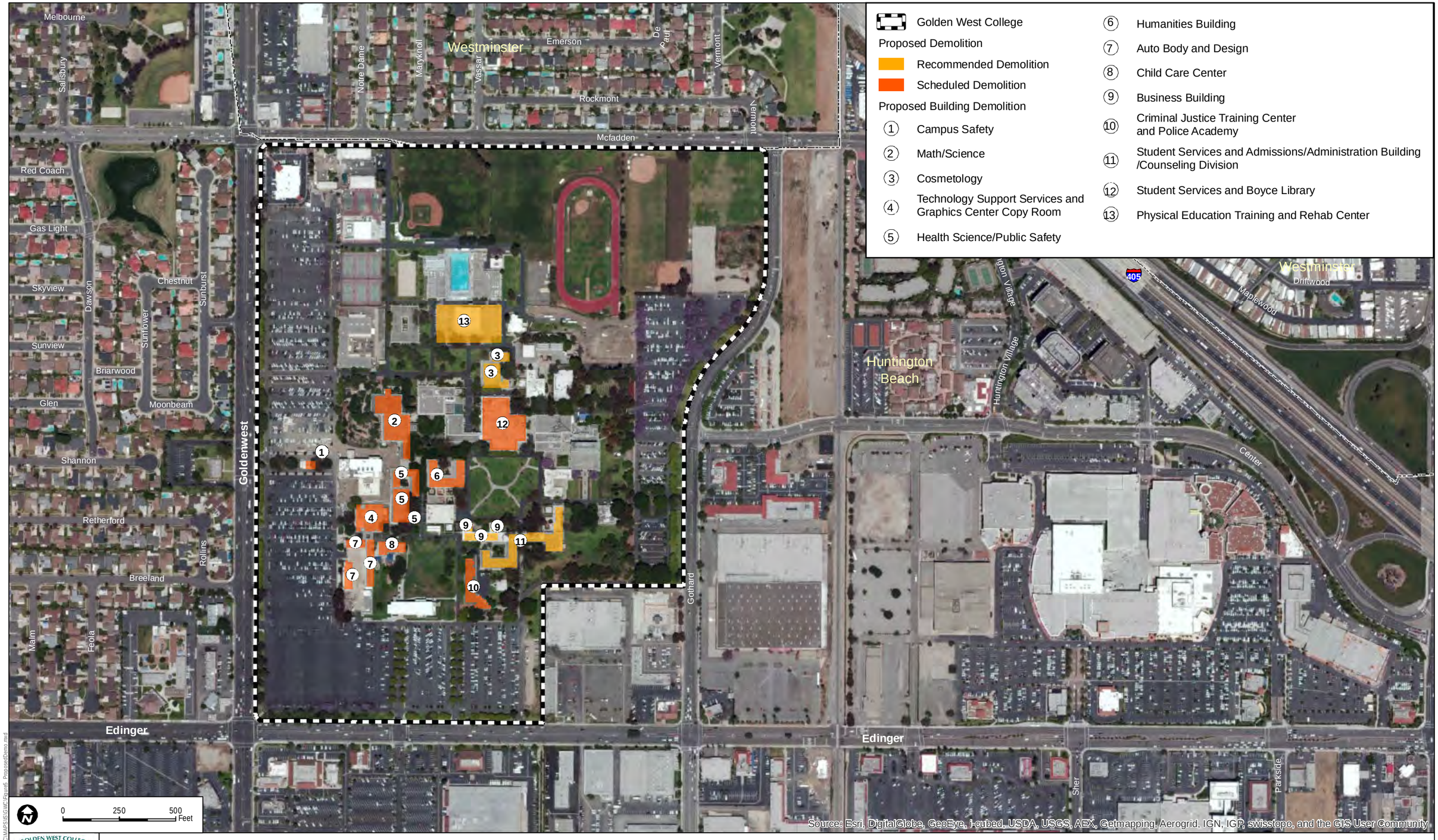

SOURCE: ESRI 2013, Coast Community College Vision Plan 2012

FIGURE 5

Proposed Demolition

7910.0001

GOLDEN WEST COLLEGE VISION 2020 FACILITIES MASTER PLAN INITIAL STUDY

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SOURCE: ESRI 2013, Coast Community College Vision Plan 2012

FIGURE 6

Proposed Vehicular Entryways, Circulation, Parking and Service Access Road Improvements

7910.0001

GOLDEN WEST COLLEGE VISION 2020 FACILITIES MASTER PLAN INITIAL STUDY

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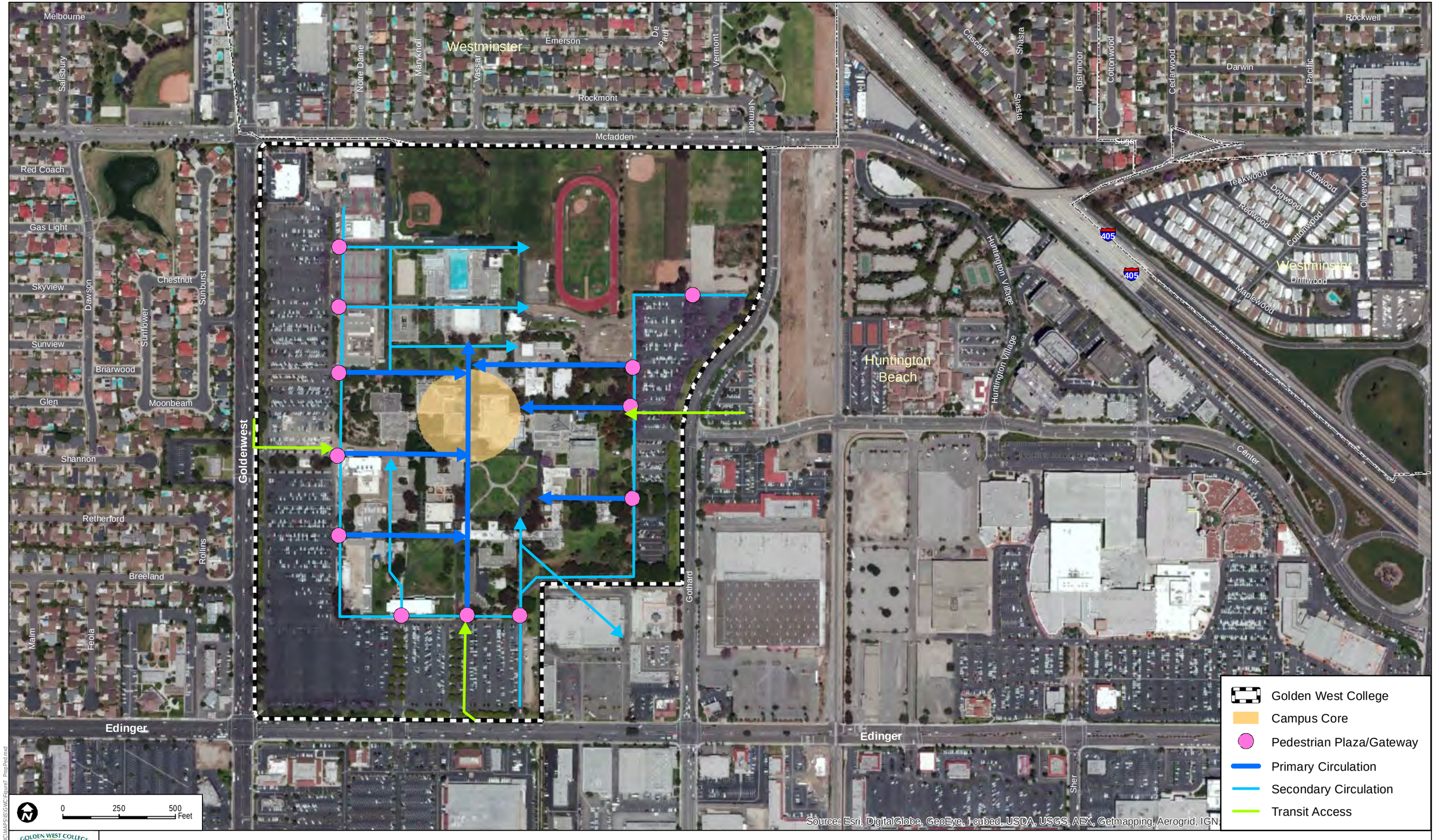

SOURCE: ESRI 2013, Coast Community College Vision Plan 2012

FIGURE 7

Proposed Pedestrian Circulation Improvements

7910.0001

GOLDEN WEST COLLEGE VISION 2020 FACILITIES MASTER PLAN INITIAL STUDY

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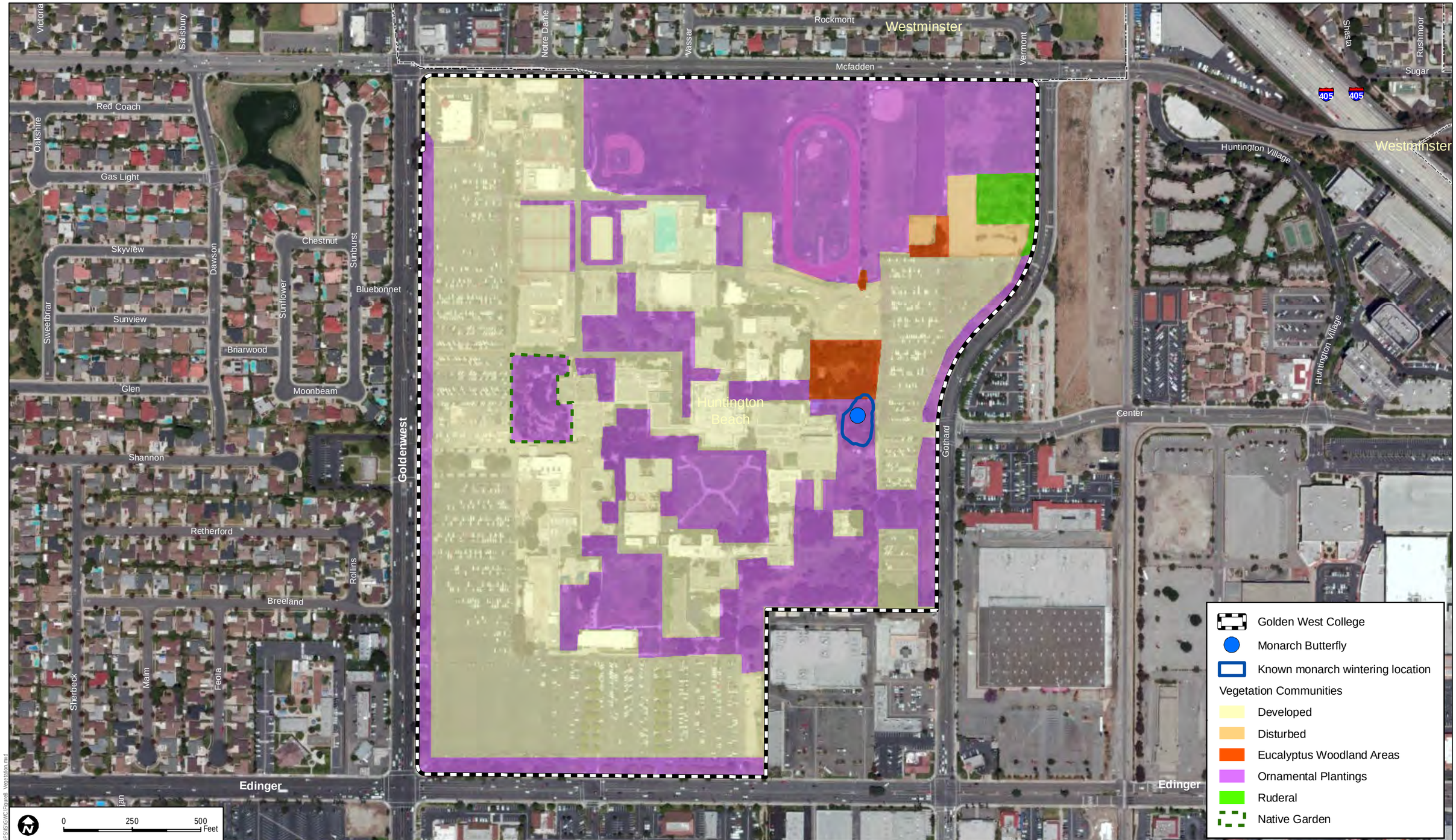

Z:\Projects\7910.01\MAPDOC\MAPS\SIGVC\Figure8_Vegetation.mxd

SOURCE: ESRI 2013, Coast Community College Vision Plan 2012, The Monarch Program (digitized wintering location)

GOLDEN WEST COLLEGE
GWC
HUNTINGTON BEACH, CA

7910.0001

FIGURE 8

Vegetation Map

GOLDEN WEST COLLEGE VISION 2020 FACILITIES MASTER PLAN INITIAL STUDY

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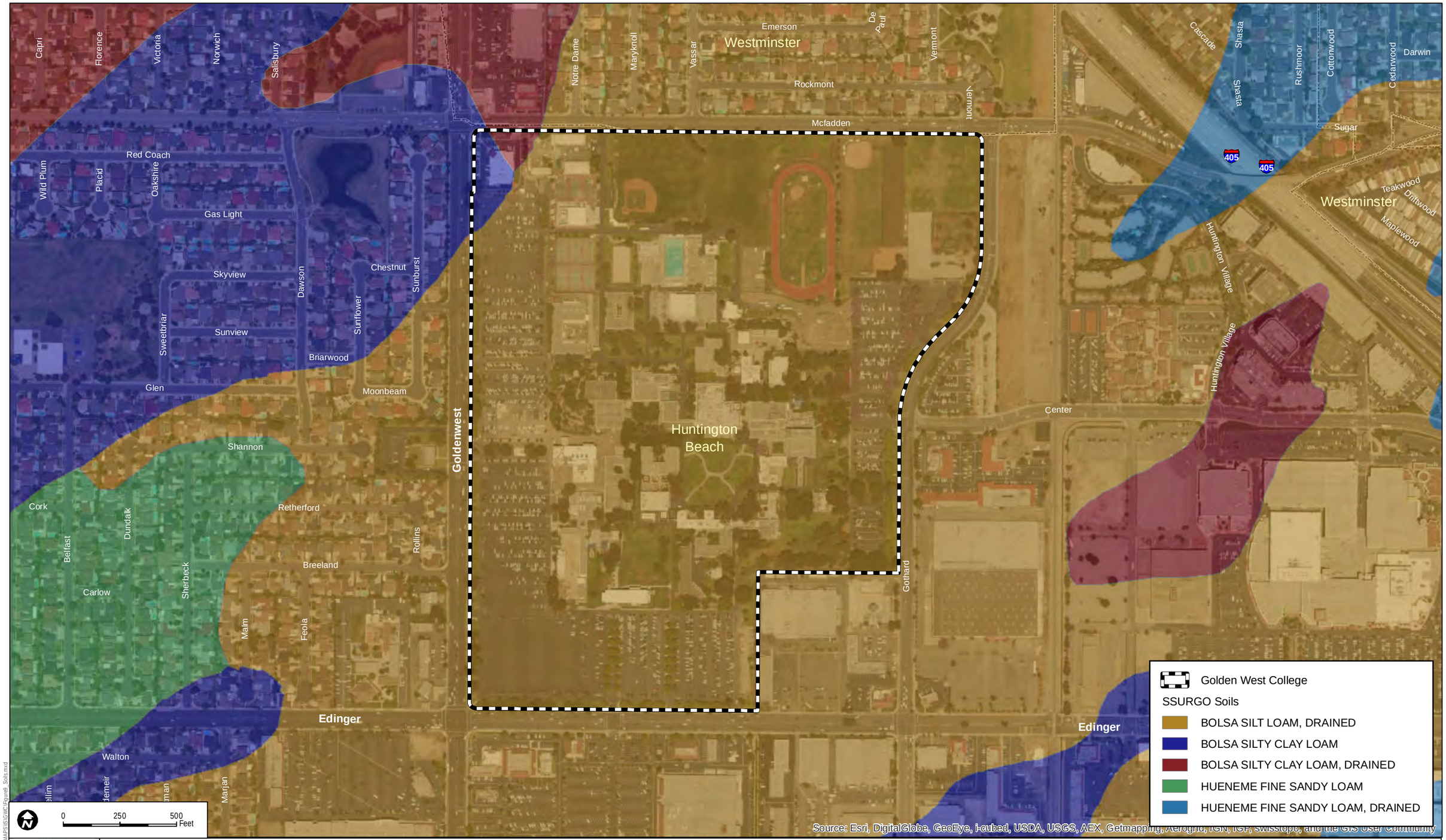

GOLDEN WEST COLLEGE
GWC
HUNTINGTON BEACH, CA

7910.0001

SOURCE: ESRI 2013, Coast Community College Vision Plan 2012, Dept. fo Conservation 2010

FIGURE 9

Soils Map

GOLDEN WEST COLLEGE VISION 2020 FACILITIES MASTER PLAN INITIAL STUDY

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APPENDIX A

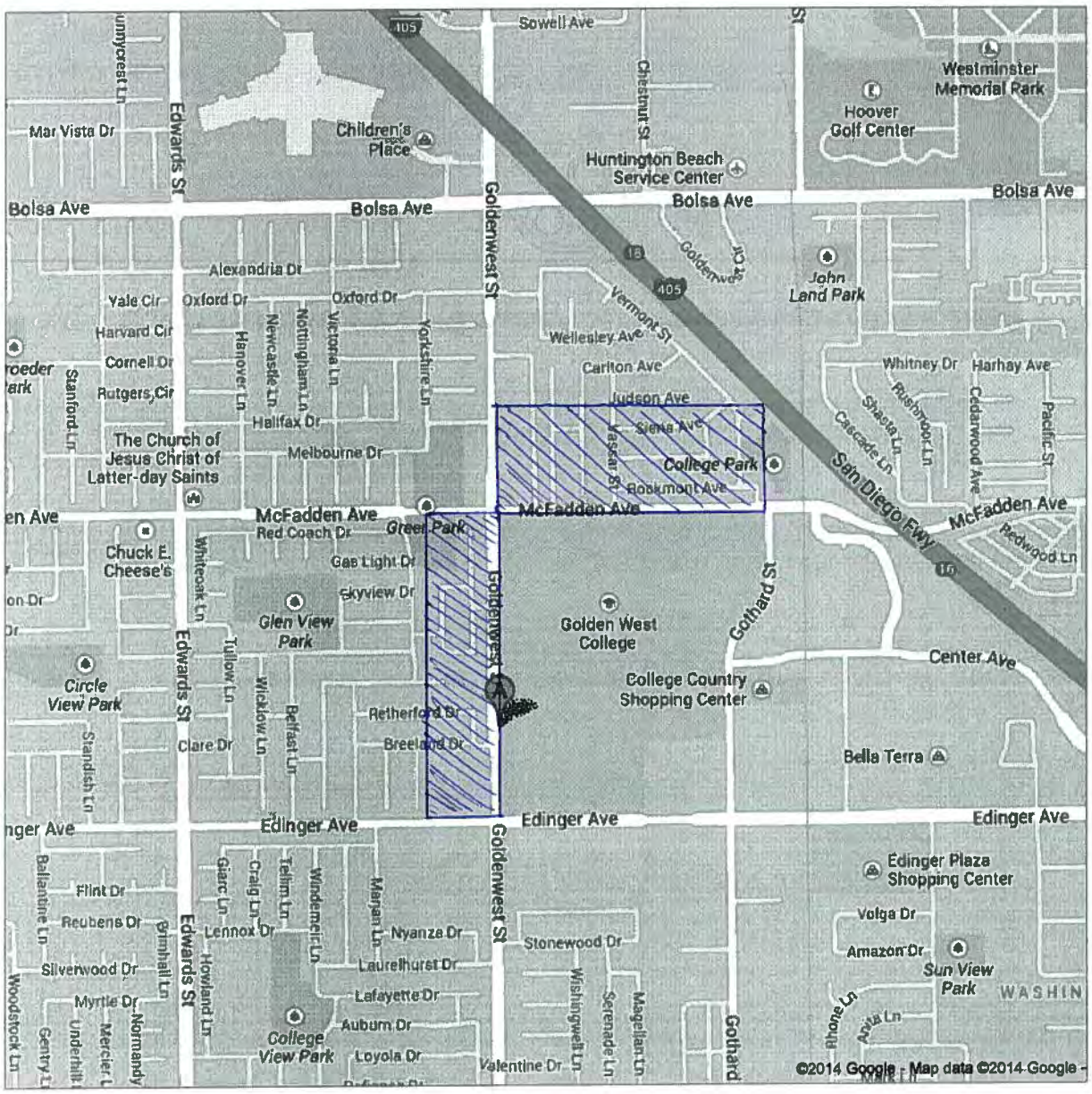
NOP Distribution List

First Name	Last Name	Title	Organization	Division	Address	City	State	ZIP
PROPERTY OWNERS								
Andy	Salas	Chairperson	Gabrieleno Band of Mission Indians/Kizh Nation		P.O. Box 393	Covina	CA	91723
John Tommy	Rosas	Tribal Administrator	Tongva Ancestral Territorial Tribal Nation		tattnlaw@gmail.com			
Joyce	Perry	Tribal Chairperson	Juaneno Band of Mission Indians Acjacheman Nation		4955 Paseo Segovia	Irvine	CA	92612
Rebecca	Robles		United Coalition to Protect Panhe		119 Avenida San Fernando	San Clemente	CA	92672
LIBRARIES								
			Helen Murphy Branch Library		15882 Graham Street	Huntington Beach	CA	92649
LOCAL--COUNTY--REGIONAL								
Hugh	Nguyen	Clerk-Recorder	County of Orange		12 Civic Center Plaza, Room 101	Santa Ana	CA	92701
			City of Huntington Beach	Planning Division	2000 Main Street 3rd Floor	Huntington Beach	CA	92648
			City of Huntington Beach	Fire Department	2000 Main Street	Huntington Beach	CA	92648
			City of Costa Mesa	Community Development Department	77 Fair Drive	Costa Mesa	CA	92626
			City of Newport Beach	Community Development Department	100 Civic Center Drive	Newport Beach	CA	92660
			City of Fountain Valley	Housing and Community Development	10200 Slater Avenue	Fountain Valley	CA	92708
			City of Seal Beach	Department of Community Development	211 Eighth Street	Seal Beach	CA	90740
			City of Westminster	Department of Community Development	8200 Westminster Blvd	Westminster	CA	92683
			South Coast Air Quality Management District		21865 Copley Dr.	Diamond Bar	CA	91765
STATE (Sent by OPR as indicated on SCH Notice of Completion)								
Ken	Alex	Director	State Clearinghouse	Governor's Office of Planning & Research	1400 Tenth Street	Sacramento	CA	95814
			California Air Resources Board					
			Caltrans	District 12				
			California Dept of Fish & Wildlife	South Coast Region (Region #5)				
			California Department of Water Resources					
			Native American Heritage Commission					
			Regional Water Quality Control Board	Santa Ana Region 8				
			State Water Resources Control Board: Water Quality					
			California Department of Toxic Substances Control					
PROJECT SPONSORS and RESPONSIBLE AGENCIES								
Jerry	Marchbank	Senior Facilities Di	Coast Community College District		1370 Adams Avenue	Costa Mesa	CA	92626
Janet	Houlihan	VP of Administrative Services	GWC		15744 Goldenwest Street	Huntington Beach	CA	92647
Dudek								
Rachel	Struglia		Dudek					
			Dudek (Additional Hard Copies)					

Door to Door Distribution of NOP

Google

Address **15722 Goldenwest St**
Huntington Beach, CA 92647



DEPARTMENT OF TRANSPORTATION
DISTRICT 12
3347 MICHELSON DRIVE, SUITE 100
IRVINE, CA 92612-8894
PHONE (949) 724-2000
FAX (949) 724-2019
TTY 711
www.dot.ca.gov

RECEIVED
JAN 29 2014
By

Flex your power!
Be energy efficient!

January 27, 2014

Jerry Marchbank
Coast Community College District
1370 Adams Avenue
Costa Mesa, California 92626

File: IGR/CEQA
SCH#: 2014011015
Log #: 3651
SR-39, I-405

Subject: Golden West College Vision 2020 Facilities Master Plan

Dear Mr. Marchbank,

Thank you for the opportunity to review and comment on the **Notice of Preparation (NOP) for the Golden West College Vision 2020 Facilities Master Plan.** The project proposes to construct new facilities and the renovation/modernization of existing buildings. I Addison, these upgrades include vehicular and pedestrian circulation improvements, recreational facilities that would be open for the public use, the construction of a Boys and Girls Club Gymnasium and a housing/mixed-use development. The nearest state routes to the project are SR-39, and I-405.

The Department of Transportation (Department) is a reviewing agency on this project and we have the following comments:

1. The project proposes to improve and construct new buildings to meet enrollment needs and provide recreational facilities. This will add vehicle trips to the current traffic network due to increase in students, staff and recreational uses. The proposed project is in close proximity to both I-405 and SR-39 (Beach Blvd). As such it is expected a number of project generated traffic will be using these State facilities. Therefore a traffic operational analysis is requested and its requirements are detailed in the Caltrans "Guide for the Preparation of Traffic Impact Studies". The following State facilities are of concern and should be analyzed:

INTERSECTIONS

1. SB I-405 at Westminster Mall
2. Golden West St at Westminster Mall
3. Golden West St at Bolsa Ave
4. SB I-405 at Center Ave
5. Beach Blvd at McFadden Ave
6. Beach Blvd at Beach Blvd
7. Beach Blvd at Edinger Ave

RAMPS

1. SB I-405 Golden West St Off Ramp
2. SB I-405 On Ramp from Westminster Mall
3. NB I-405 On Ramp from NB Golden West St
4. SB I-405 On Ramp from EB Bolsa Ave
5. SB I-405 Bolsa Ave Off Ramp
6. NB I-405 Bolsa Ave Off Ramp
7. SB I-405 Beach Blvd (South) Off Ramp
8. SB I-405 Beach Blvd (North) Off Ramp
9. SB I-405 On Ramp from Center Ave
10. NB I-405 Beach Blvd (South) Off Ramp
11. NB I-405 Beach Blvd (North) Off Ramp
12. NB I-405 On Ramp from NB Beach Blvd
13. SB I-405 On Ramp from EB Edinger Ave

Please continue to keep us informed of this project and any future developments, which could potentially impact the State Transportation Facilities. If you have any questions or need to contact us, please do not hesitate to call Miya Edmonson at (949) 724-2228.

Sincerely,

Maureen El Harake

Maureen El Harake, Branch Chief
Regional-Community-Transit Planning

C: Scott Morgan, Office of Planning and Research

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
South Coast Region
3883 Ruffin Road
San Diego, CA 92123
(858) 467-4201
www.wildlife.ca.gov

EDMUND G. BROWN JR., Governor
CHARLTON H. BONHAM, Director

January 24, 2014

Mr. Jerry Marchbank
Orange Coast College
1370 Adams Avenue
Costa Mesa, CA 92626
jmarchbank@mail.cccd.edu

Subject: Comments on the Notice of Preparation of a Draft Program Environmental Impact Report for the Golden West College Vision 2020 Facilities Master Plan, Huntington Beach, CA (SCH# 20144011015)

Dear Mr. Marchbank:

The California Department of Fish and Wildlife (Department) has reviewed the above-referenced Notice of Preparation (NOP) for the Golden West College Vision 2020 Facilities Master Plan Draft Program Environmental Impact Report (PEIR). The following statements and comments have been prepared pursuant to the Department's authority as Trustee Agency with jurisdiction over natural resources affected by the project (California Environmental Quality Act, [CEQA] Guidelines §15386) and pursuant to our authority as a Responsible Agency under CEQA Guidelines section 15381 over those aspects of the proposed project that come under the purview of the California Endangered Species Act (Fish and Game Code §2050 *et seq.*) and Fish and Game Code section 1600 *et seq*. The Department also administers the Natural Community Conservation Planning (NCCP) program.

Golden West College (GWC) is an approximately 120-acre site located in the City of Huntington Beach in northwest Orange County. The project site is surrounded by the cities of Westminster to the north, Santa Ana to the east and Huntington Beach to the west and the south. The campus is bound by McFadden Avenue to the north, Gothard Street to the east, Edinger Avenue to the south, and Goldenwest Street to the west. The City of Westminster is located immediately north of the campus across McFadden Avenue, and is characterized by low-density housing near the campus.

The Coast Community College District (District) is updating its Facilities Master Plan for GWC. The District plans to construct new, larger buildings housing similar disciplines and replace the smaller and spatially less efficient classroom buildings in the center of the campus in addition to implementing various parking and pedestrian circulation improvements. Habitat types include Eucalyptus and other non-native ornamental trees, which serve as perching sites for raptors such as Cooper's hawk (*Accipiter cooperii*; Initial Study page 32).

The Department offers the following comments and recommendations to assist the District in avoiding or minimizing potential project impacts on biological resources.

1. The Department considers adverse impacts to a species protected by the California Endangered Species Act (CESA), for the purposes of CEQA, to be significant without

mitigation. As to CESA, take of any endangered, threatened, or candidate species that results from the project is prohibited, except as authorized by state law (Fish and Game Code, §§ 2080, 2085.) Consequently, if the project, project construction, or any project-related activity during the life of the project will result in take of a species designated as endangered or threatened, or a candidate for listing under CESA, the Department recommends that the project proponent seek appropriate take authorization under CESA prior to implementing the project. Appropriate authorization from the Department may include an incidental take permit (ITP) or a consistency determination in certain circumstances, among other options (Fish and Game Code §§ 2080.1, 2081, subs. (b),(c)). Early consultation is encouraged, as significant modification to a project and mitigation measures may be required in order to obtain a CESA Permit. Revisions to the Fish and Game Code, effective January 1998, may require that the Department issue a separate CEQA document for the issuance of an ITP unless the project CEQA document addresses all project impacts to CESA-listed species and specifies a mitigation monitoring and reporting program that will meet the requirements of an ITP. For these reasons, biological mitigation monitoring and reporting proposals should be of sufficient detail and resolution to satisfy the requirements for a CESA ITP.

2. To enable the Department to adequately review and comment on the proposed project from the standpoint of the protection of plants, fish and wildlife, we recommend the following information be included in the PEIR.

   a. A complete discussion of the purpose and need for, and description of, the proposed project, including all staging areas and access routes to the construction and staging areas.

   b. A range of feasible alternatives to ensure that alternatives to the proposed project are fully considered and evaluated; the alternatives should avoid or otherwise minimize impacts to sensitive biological resources. Specific alternative locations should be evaluated in areas with lower resource sensitivity where appropriate.

Biological Resources within the Project's Area of Potential Effect

3. To provide a complete assessment of the flora and fauna within and adjacent to the project area, with particular emphasis upon identifying endangered, threatened, sensitive, and locally unique species and sensitive habitats, the PEIR should include the following information.

   a. Per CEQA Guidelines, section 15125(c), information on the regional setting that is critical to an assessment of environmental impacts, with special emphasis should be placed on resources that are rare or unique to the region.

   b. A thorough assessment of rare plants and rare natural communities, following the Department's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (see: http://www.wildlife.ca.gov/habcon/plant/) (hard copy available on request).

   c. A current inventory of the biological resources associated with each habitat type on site and within the area of potential effect. The Department's California Natural Diversity

Data Base in Sacramento should be contacted at (916) 322-2493 or www.wildlife.ca.gov/biogeodata/ to obtain current information on any previously reported sensitive species and habitat, including Significant Natural Areas identified under Chapter 12 of the Fish and Game Code.

d. An inventory of rare, threatened, and endangered, and other sensitive species on site and within the area of potential effect. Species to be addressed should include all those which meet the CEQA definition (see CEQA Guidelines, §15380). This should include sensitive fish, wildlife, reptile, and amphibian species. Seasonal variations in use of the project area should also be addressed. Focused species-specific surveys, conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable, are required. Acceptable species-specific survey procedures should be developed in consultation with the Department and the U.S. Fish and Wildlife Service.

Analyses of the Potential Project-Related Impacts on the Biological Resources

4. To provide a thorough discussion of direct, indirect, and cumulative impacts expected to adversely affect biological resources, with specific measures to offset such impacts, the following should be addressed in the PEIR.

   a. A discussion of potential adverse impacts from lighting, noise, human activity, exotic species, and drainage should also be included. The latter subject should address: project-related changes on drainage patterns on and downstream of the project site; the volume, velocity, and frequency of existing and post-project surface flows; polluted runoff; soil erosion and/or sedimentation in streams and water bodies; and post-project fate of runoff from the project site. The discussions should also address the proximity of the extraction activities to the water table, whether dewatering would be necessary, and the potential resulting impacts on the habitat, if any, supported by the groundwater. Mitigation measures proposed to alleviate such impacts should be included.

   b. Discussions regarding indirect project impacts on biological resources, including resources in nearby public lands, open space, adjacent natural habitats, riparian ecosystems, and any designated and/or proposed or existing reserve lands (e.g., preserve lands associated with a NCCP). Impacts on, and maintenance of, wildlife corridor/movement areas, including access to undisturbed habitats in adjacent areas, should be fully evaluated in the PEIR.

   c. The zoning of areas for development projects or other uses that are nearby or adjacent to natural areas may inadvertently contribute to wildlife-human interactions. A discussion of possible conflicts and mitigation measures to reduce these conflicts should be included in the environmental document.

   d. A cumulative effects analysis should be developed as described under CEQA Guidelines, section 15130. General and specific plans, as well as past, present, and anticipated future projects, should be analyzed relative to their impacts on similar plant communities and wildlife habitats.

Mitigation for the Project-related Biological Impacts

5. The PEIR should include measures to fully avoid and otherwise protect Rare Natural Communities from project-related impacts. The Department considers these communities as threatened habitats having both regional and local significance.

6. The PEIR should include mitigation measures for adverse project-related impacts to sensitive plants, animals, and habitats. Mitigation measures should emphasize avoidance and reduction of project impacts. For unavoidable impacts, on-site habitat restoration or enhancement should be discussed in detail. If on-site mitigation is not feasible or would not be biologically viable and therefore not adequately mitigate the loss of biological functions and values, off-site mitigation through habitat creation and/or acquisition and preservation in perpetuity should be addressed.

7. For proposed preservation and/or restoration, the PEIR should include measures to perpetually protect the targeted habitat values from direct and indirect negative impacts. The objective should be to offset the project-induced qualitative and quantitative losses of wildlife habitat values. Issues that should be addressed include restrictions on access, proposed land dedications, monitoring and management programs, control of illegal dumping, water pollution, increased human intrusion, etc.

8. The Department recommends that measures be taken to avoid project impacts to nesting birds. Migratory nongame native bird species are protected by international treaty under the Federal Migratory Bird Treaty Act (MBTA) of 1918 (50 C.F.R. Section10.13). Sections 3503, 3503.5, and 3513 of the Fish and Game Code prohibit take of all birds and their active nests including raptors and other migratory nongame birds (as listed under the Federal MBTA).

    a. If avoidance of the avian breeding season is not feasible, the Department recommends surveys by a qualified biologist with experience in conducting breeding bird surveys to detect protected native birds occurring in suitable nesting habitat that is to be disturbed and (as access to adjacent areas allows) any other such habitat within 300 feet of the disturbance area (within 500 feet for raptors). Project personnel, including all contractors working on site, should be instructed on the sensitivity of the area. Reductions in the nest buffer distance may be appropriate depending on the avian species involved, ambient levels of human activity, screening vegetation, or possibly other factors.

    b. Further avoidance of direct impacts to birds, particularly migratory species, can be achieved through incorporation of 'bird safe' elements in architectural design. Elements such as glazed windows, well-articulated building facades, and minimal nighttime lighting are encouraged to reduce collisions of migratory birds with buildings. Large flat windows, reflective glass, and transparent corners are discouraged. For further guidance on this subject the Department recommends review of the following literature: 1) Standards for Bird-Safe Buildings, San Francisco Planning Department, Adopted July 14, 2011; and 2) Klem Jr., D. 2009. Preventing Bird – Window Collisions. The Wilson Journal of Ornithology 121(2):314-321.

9. The Department generally does not support the use of relocation, salvage, and/or transplantation as mitigation for impacts to rare, threatened, or endangered species. Studies have shown that these efforts are experimental in nature and largely unsuccessful.

10. Plans for restoration and revegetation should be prepared by persons with expertise in southern California ecosystems and native plant revegetation techniques. Each plan should include, at a minimum: (a) the location of the mitigation site; (b) the plant species to be used, container sizes, and seeding rates; (c) a schematic depicting the mitigation area; (d) planting schedule; (e) a description of the irrigation methodology; (f) measures to control exotic vegetation on site; (g) specific success criteria; (h) a detailed monitoring program; (i) contingency measures should the success criteria not be met; and (j) identification of the party responsible for meeting the success criteria and providing for conservation of the mitigation site in perpetuity.

We appreciate the opportunity to comment on the referenced NOP. Questions regarding this letter and further coordination on these issues should be directed to Jennifer Edwards at (858) 467-2717 and via email at jennifer.edwards@wildlife.ca.gov.

Sincerely,

Marilyn Fluharty for

Betty J. Courtney
Environmental Program Manager
South Coast Region

ec: Chris Medak (U.S. Fish and Wildlife Service)
Scott Morgan (State Clearinghouse)

City of Huntington Beach

2000 MAIN STREET CALIFORNIA 92648

DEPARTMENT OF PLANNING AND BUILDING

www.huntingtonbeachca.gov

Planning Division
714.536.5271

Building Division
714.536.5241

RECEIVED
FEB 19 2014
By

February 10, 2014

Jerry Marchbank
1370 Adams Avenue
Costa Mesa, CA 92626

Subject: Notice of Preparation of Draft PEIR for the Vision 2020 Facilities Master Plan, Golden West College project

Dear Mr. Marchbank:

The City of Huntington Beach has reviewed the Notice of Preparation (NOP) for the proposed Golden West College Master Plan. The City of Huntington Beach has the following comments and recommends that these issues be addressed in the Draft Program Environmental Impact Report (PEIR) that will be prepared for this project.

Project Description

- The proposed project phasing does not include timing for the proposed site improvement elements of the master plan, specifically, the pedestrian bridge over Gothard Street and the proposed vehicular and pedestrian entry way and circulation improvements. The timing and an analysis of these elements should be addressed in the PEIR in the appropriate topical impact section(s).

- The City's Public Works and Fire Departments should be consulted regarding the design of the pedestrian bridge for compliance with applicable City codes and specifications.

- Section 4 states that the City of Huntington Beach would issue building permits for new buildings. However, this section also states that the DSA would have oversight of construction plan approval. Coordination with the City's Building Division should occur to determine which agency would have plan approval and permit issuance authority over the various buildings that are proposed.

Aesthetics

- The Aesthetics section should address the City of Huntington Beach's General Plan Circulation Element that depicts Edinger Avenue and Goldenwest Street as Minor Urban

Scenic Corridors and Gothard Street as a Landscape Corridor. The PEIR should analyze the project's impacts in this regard.

Biological Resources

- The PEIR should analyze impacts for healthy mature trees proposed to be removed. Mitigation should include preservation in place or relocation on site as feasible. Any healthy mature trees that require removal should be replaced at a 2:1 ratio. In addition, impacts to bird species protected under the Migratory Bird Treaty Act should be analyzed. Mitigation should include pre-construction nesting surveys and appropriate avoidance measures in accordance with established protocols.

Land Use and Planning

- The PEIR should discuss and analyze potential impacts with respect to compatibility with the regulations and guidelines of the Beach and Edinger Corridors Specific Plan, which was adopted by the City in 2010 and is adjacent to the college on the south and east.

- This section states that the project would be compatible with the goals and regulations of the City's General Plan and zoning code. The PEIR should address how the project conforms to the City's General Plan goals and policies. In addition, how was it determined that program-level elements would be compatible with the City's General Plan and existing codes? Is it assumed that program-level elements would require additional environmental review in the future? This should be discussed in the PEIR.

Noise

- The PEIR should note that the Huntington Beach Municipal Code provides an exemption for noise associated with construction provided construction activities occurs during certain hours/days of the week. This should be included in the Noise analysis of the PEIR.

Traffic/Transportation

- The traffic impact analysis should include an evaluation of potential vehicle and pedestrian traffic impacts on the adjacent street system. Scope and methodology for the study should be in accordance with the City of Huntington Beach requirements.

- The traffic impact analysis should also include a review of projected parking needs including an assessment of potential impacts to adjacent land uses.

- The traffic impact analysis should address potential transit demands/needs and the ability of current and projected services to meet those needs.

Utilities and Service Systems

- The City of Huntington Beach provides water to Golden West College and a hydraulic analysis of the proposed project should be completed to assess impacts to the City's water lines.

General Comments

- The General Plan land use designation is Public (initial study calls out as "Public School"). This should be corrected in the PEIR. Also, the northwest corner of the campus where the CVS is located has a General Plan land use designation of Commercial General – 0.35 Floor Area Ratio (CG-F1) and a Zoning designation of Commercial General (CG).

- Section 9 of the initial study states that existing uses south of Edinger Avenue and east of Gothard Street are commercial/retail neighborhoods. However, existing and under construction developments east of Gothard Street include mixed use: commercial/residential and should be noted in the PEIR. In addition, future uses south of Edinger are approved for mixed use and residential development.

Thank you for the opportunity to comment on the NOP. We look forward to reviewing the Draft Program Environmental Impact Report when it is available. Should you have any questions or want to discuss the contents of this letter, please contact me at 714-374-1661 or via email at jvillasenor@surfcity-hb.org.

Sincerely,

Jennifer Villasenor
Senior Planner

CITY OF HUNTINGTON BEACH

2000 Main Street
California 92648

Phone: (714) 536-5411
www.huntingtonbeachca.gov

FIRE DEPARTMENT

Patrick McIntosh
Fire Chief

RECEIVED
JAN 22 2014
By

January 16, 2014

Mr. Jerry Marchbank
Senior Director, Facilities, Planning and Construction
Coast Community College District
1370 Adams Avenue
Costa Mesa, CA 92626

RE: Vision 2020 Facilities Master Plan PEIR, Golden West College

Dear Mr. Marchbank,

The Huntington Beach Fire Department (HBFD) received a letter dated 1/9/14 from Coast Community College District (CCCD) requesting comments concerning the Draft Program Environmental Impact Report (PEIR) for Golden West College.

Per current Division of State Architect procedure (DSA 810 form), the local fire authority (LFA) has jurisdiction over all fire apparatus access lanes, access gates, fire hydrant / fire pump / fire department connections (FDC) / post indicator valve (PIV) / double check valve assembly (DCVA) locations, water supply, etc.

As the LFA for this site, our response to the CCCD PEIR is as follows:

- Fire apparatus access lanes must be in full compliance with HBFD City Specification #401 "*Minimum Standards for Fire Apparatus Access*".
- Fire lane signage and striping must be in full compliance with HBFD City Specification #415 "*Fire Lanes Signage and Markings on Private, Residential, Commercial and Industrial Properties*".
- Fire access gates must be in full compliance with HBFD City Specification #403 "*Fire Access for Pedestrian or Vehicular Security Gates & Buildings*".
- Fire pump / FDC / PIV / DCVA locations must be in full compliance with HBFD City Specification #420 "*Automatic Sprinkler, Underground and Hydrant Systems*".
- Fire hydrant locations and distribution must be in full compliance with HBFD City Specification #420 "*Automatic Sprinkler, Underground and Hydrant Systems*" and City Specification #407 "*Fire Hydrant Installation Standards*".
- Elevators must meet all building and fire code requirements for medical emergency service on cab size, where applicable per current adopted codes.

To access the HBFD City Specifications, please go to the City website at:

http://www.huntingtonbeachca.gov/government/departments/Fire/fire_prevention_code_enforcement/fire_dept_city_specifications.cfm

Thank you for this opportunity to provide comments for these upcoming projects at Golden West College. The HBFD looks forward to working with the CCCD to continue providing the quickest response time and highest quality service for fire and life safety within the college campus.

For any questions or clarifications, please feel free to contact me at the phone number or e-mail listed below, or send written correspondence to the address listed above.

Sincerely,

James Brown
Fire Protection Analyst
Huntington Beach Fire Department
7145-374-5344
jbrown@surfcity-hb.org

SATE OF CALIFORNIA Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Boulevard, Suite 100
West Sacramento, CA 95691
(916) 373-3715
Fax (916) 373-5471
Web Site www.nahc.ca.gov
Ds_nahc@pacbell.net
e-mail: ds_nahc@pacbell.net

January 15, 2014

Mr. Jerry Marchbank, Facilities Planner
Coast Community College District
1370 Adams Avenue
Costa Mesa, CA 92626

RE: SCH#2014011015 CEQA Notice of Preparation (NOP); draft Environmental Impact Report (DEIR) for the **"Golden West College Vision 2020 Facilities Master Plan;"** located in the Huntington Beach area in northwest Orange County, California

Dear Mr. Marchbank:

The Native American Heritage Commission (NAHC) has reviewed the above-referenced environmental document

The California Environmental Quality Act (CEQA) states that any project which includes archeological resources, is a significant effect requiring the preparation of an EIR (CEQA guidelines 15064.5(b). To adequately comply with this provision and mitigate project-related impacts on archaeological resources, the Commission recommends the following actions be required:

Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, pursuant to California Environmental Quality Act (CEQA) §15064.5(f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities. Also, California Public Resources Code Section 21083.2 require documentation and analysis of archaeological items that meet the standard in Section 15064.5 (a)(b)(f).

We suggest that this (additional archaeological activity) be coordinated with the NAHC, if possible. The final report containing site forms, site significance, and mitigation measurers should be submitted immediately to the planning department. Any information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for pubic disclosure pursuant to California Government Code Section 6254.10.

A list of appropriate Native American Contacts for consultation concerning the project site has been provided and is attached to this letter to determine if the proposed active might impinge on any cultural resources.

California Government Code Section 65040.12(e) defines "environmental justice" to provide "fair treatment of People...with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations and policies." (The California Code is consistent with the Federal Executive Order 12898 regarding 'environmental justice.' Also, applicable to state agencies is Executive Order B-10-11 requires consultation with Native American tribes their elected officials and other representatives of tribal governments to provide meaningful input into the development of legislation, regulations, rules, and policies on matters that may affect tribal communities.

Lead agencies should consider first, avoidance for sacred and/or historical sites, pursuant to CEQA Guidelines 15370(a). Then if the project goes ahead then, lead agencies include in their mitigation and monitoring plan provisions for the analysis and disposition of recovered artifacts, pursuant to California Public Resources Code Section 21083.2 in consultation with culturally affiliated Native Americans.

Lead agencies should include provisions for discovery of Native American human remains in their mitigation plan. Health and Safety Code §7050.5, CEQA §15064.5(e), and Public Resources Code §5097.98 mandates the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery.

Sincerely,

Dave Singleton
Program Analyst

CC: State Clearinghouse

Attachment: Native American Contacts list

Native American Contacts
Orange County California
January 15, 2014

Juaneno Band of Mission Indians Acjachemen Nation
David Belardes, Chairperson
32161 Avenida Los Amigos Juaneno
San Juan Capistrano CA 92675
chiefdavidbelardes@yahoo.
(949) 493-4933 - home
(949) 293-8522

Juaneno Band of Mission Indians Acjachemen Nation
Teresa Romero, Chairwoman
31411-A La Matanza Street Juaneno
San Juan Capistrano CA 92675-2674
(949) 488-3484
(949) 488-3294 - FAX
(530) 354-5876 - cell

Tongva Ancestral Territorial Tribal Nation
John Tommy Rosas, Tribal Admin.
Private Address Gabrielino Tongva
,
tattnlaw@gmail.com
310-570-6567

Gabrielino Tongva Indians of California Tribal Council
Robert F. Dorame, Tribal Chair/Cultural Resources
P.O. Box 490 Gabrielino Tongva
Bellflower , CA 90707
gtongva@verizon.net
562-761-6417 - voice
562-761-6417- fax

Gabrieleno/Tongva San Gabriel Band of Mission
Anthony Morales, Chairperson
PO Box 693 Gabrielino Tongva
San Gabriel , CA 91778
GTTribalcouncil@aol.com
(626) 286-1232 - FAX
(626) 286-1758 - Home
(626) 286-1262 -FAX

Juaneno Band of Mission Indians
Adolph 'Bud' Sepulveda, Vice Chairperson
P.O. Box 25828 Juaneno
Santa Ana , CA 92799
bssepul@yahoo.net
714-838-3270
714-914-1812 - CELL
bsepul@yahoo.net

Gabrielino /Tongva Nation
Sandonne Goad, Chairperson
P.O. Box 86908 Gabrielino Tongva
Los Angeles , CA 90086
sgoad@gabrielino-tongva.com
951-845-0443

Juaneño Band of Mission Indians
Sonia Johnston, Tribal Chairperson
P.O. Box 25628 Juaneno
Santa Ana , CA 92799
sonia.johnston@sbcglobal.
714-323-8312
714-998-0721

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

his list s only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2014011015; cEQA Notice of Preparation (NOP); draft Environmental Impact Report (DEIR) for the Golden West College 2020 Vision Facilities Master Plan; located in northwestern Orange County, California.

Native American Contacts
Orange County California
January 15, 2014

United Coalition to Protect Panhe (UCPP)
Rebecca Robles
119 Avenida San Fernando Juaneno
San Clemente CA 92672
rebrobles1@gmail.com
(949) 573-3138

Gabrieleno Band of Mission Indians
Andrew Salas, Chairperson
P.O. Box 393 Gabrielino
Covina , CA 91723
gabrielenoindians@yahoo.
(626) 926-4131

Gabrielino-Tongva Tribe
Bernie Acuna, Co-Chairperson
P.O. Box 180 Gabrielino
Bonsall , CA 92003
(619) 294-6660-work
(310) 428-5690 - cell
(760) 636-0854- FAX
bacuna1@gabrielinotribe.org

Gabrielino-Tongva Tribe
Conrad Acuna,
P.O. Box 180 Gabrielino
Bonsall , CA 92003

760-636-0854 - FAX

Juaneno Band of Mission Indians Acjachemen Nation
Joyce Perry, Representing Tribal Chairperson
4955 Paseo Segovia Juaneno
Irvine , CA 92612
kaamalam@gmail.com
949-293-8522

Gabrielino /Tongva Nation
Sam Dunlap, Cultural Resorces Director
P.O. Box 86908 Gabrielino Tongva
Los Angeles , CA 90086
samdunlap@earthlink.net
909-262-9351

Gabrielino-Tongva Tribe
Linda Candelaria, Co-Chairperson
P.O. Box 180 Gabrielino
Bonsall , CA 92003
palmsprings9@yahoo.com
626-676-1184- cell
(760) 636-0854 - FAX

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

his list s only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2014011015; cEQA Notice of Preparation (NOP); draft Environmental Impact Report (DEIR) for the Golden West College 2020 Vision Facilities Master Plan; located in northwestern Orange County, California.

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

RECEIVED
FEB 19 2014
By

February 14, 2014

Jerry Marchbank, Senior Director, Facilities, Planning and Construction
Coast Community College District
1370 Adams Avenue
Costa Mesa, CA 92626

Notice of Preparation of a CEQA Document for the
Vision 2020 Facilities Master Plan, Golden West College

The South Coast Air Quality Management District (SCAQMD) staff appreciates the opportunity to comment on the above-mentioned document. The SCAQMD staff's comments are recommendations regarding the analysis of potential air quality impacts from the proposed project that should be included in the draft CEQA document. Please send the SCAQMD a copy of the Draft EIR upon its completion. Note that copies of the Draft EIR that are submitted to the State Clearinghouse are not forwarded to the SCAQMD. Please forward a copy of the Draft EIR directly to SCAQMD at the address in our letterhead. **In addition, please send with the draft EIR all appendices or technical documents related to the air quality and greenhouse gas analyses and electronic versions of all air quality modeling and health risk assessment files. These include original emission calculation spreadsheets and modeling files (not Adobe PDF files). Without all files and supporting air quality documentation, the SCAQMD will be unable to complete its review of the air quality analysis in a timely manner. Any delays in providing all supporting air quality documentation will require additional time for review beyond the end of the comment period.**

Air Quality Analysis

The SCAQMD adopted its California Environmental Quality Act (CEQA) Air Quality Handbook in 1993 to assist other public agencies with the preparation of air quality analyses. The SCAQMD recommends that the Lead Agency use this Handbook as guidance when preparing its air quality analysis. Copies of the Handbook are available from the SCAQMD's Subscription Services Department by calling (909) 396-3720. More recent guidance developed since this Handbook was published is also available on SCAQMD's website here: www.aqmd.gov/ceqa/hdbk.html. SCAQMD staff also recommends that the lead agency use the CalEEMod land use emissions software. This software has recently been updated to incorporate up-to-date state and locally approved emission factors and methodologies for estimating pollutant emissions from typical land use development. CalEEMod is the only software model maintained by the California Air Pollution Control Officers Association (CAPCOA) and replaces the now outdated URBEMIS. This model is available free of charge at: www.caleemod.com.

The Lead Agency should identify any potential adverse air quality impacts that could occur from all phases of the project and all air pollutant sources related to the project. Air quality impacts from both construction (including demolition, if any) and operations should be calculated. Construction-related air quality impacts typically include, but are not limited to, emissions from the use of heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road mobile sources (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips). Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources (e.g., boilers), area sources (e.g., solvents and coatings), and vehicular trips (e.g., on- and off-road tailpipe emissions and entrained dust). Air quality impacts from indirect sources, that is, sources that generate or attract vehicular trips should be included in the analysis.

The SCAQMD has also developed both regional and localized significance thresholds. The SCAQMD staff requests that the lead agency quantify criteria pollutant emissions and compare the results to the recommended regional significance thresholds found here: http://www.aqmd.gov/ceqa/handbook/signthres.pdf. In addition to analyzing regional air quality impacts, the SCAQMD staff recommends calculating localized air quality impacts and comparing the results to localized significance thresholds (LSTs). LST's can be used in addition to the recommended regional significance thresholds as a second indication of air quality impacts when preparing a CEQA document. Therefore,

when preparing the air quality analysis for the proposed project, it is recommended that the lead agency perform a localized analysis by either using the LSTs developed by the SCAQMD or performing dispersion modeling as necessary. Guidance for performing a localized air quality analysis can be found at: http://www.aqmd.gov/ceqa/handbook/LST/LST.html.

In the event that the proposed project generates or attracts vehicular trips, especially heavy-duty diesel-fueled vehicles, it is recommended that the lead agency perform a mobile source health risk assessment. Guidance for performing a mobile source health risk assessment ("*Health Risk Assessment Guidance for Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis*") can be found at: http://www.aqmd.gov/ceqa/handbook/mobile_toxic/mobile_toxic.html. An analysis of all toxic air contaminant impacts due to the use of equipment potentially generating such air pollutants should also be included.

In addition, guidance on siting incompatible land uses (such as placing homes near freeways) can be found in the California Air Resources Board's *Air Quality and Land Use Handbook: A Community Perspective*, which can be found at the following internet address: http://www.arb.ca.gov/ch/handbook.pdf. CARB's Land Use Handbook is a general reference guide for evaluating and reducing air pollution impacts associated with new projects that go through the land use decision-making process.

Mitigation Measures

In the event that the project generates significant adverse air quality impacts, CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized during project construction and operation to minimize or eliminate these impacts. Pursuant to state CEQA Guidelines §15126.4 (a)(1)(D), any impacts resulting from mitigation measures must also be discussed. Several resources are available to assist the Lead Agency with identifying possible mitigation measures for the project, including:

- Chapter 11 of the SCAQMD *CEQA Air Quality Handbook*
- SCAQMD's CEQA web pages at: www.aqmd.gov/ceqa/handbook/mitigation/MM_intro.html
- CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures* available here: http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf.
- SCAQMD's Rule 403 – Fugitive Dust, and the Implementation Handbook for controlling construction-related emissions
- Other measures to reduce air quality impacts from land use projects can be found in the SCAQMD's Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. This document can be found at the following internet address: http://www.aqmd.gov/prdas/aqguide/aqguide.html.

Data Sources

SCAQMD rules and relevant air quality reports and data are available by calling the SCAQMD's Public Information Center at (909) 396-2039. Much of the information available through the Public Information Center is also available via the SCAQMD's webpage (http://www.aqmd.gov).

The SCAQMD staff is available to work with the Lead Agency to ensure that project emissions are accurately evaluated and mitigated where feasible. If you have any questions regarding this letter, please contact me at imacmillan@aqmd.gov or call me at (909) 396-3244.

Sincerely,

Ian MacMillan
Program Supervisor, CEQA Inter-Governmental Review
Planning, Rule Development & Area Sources

ORC140109-04
Control Number

STATE OF CALIFORNIA

Governor's Office of Planning and Research

State Clearinghouse and Planning Unit

Edmund G. Brown Jr.
Governor

Ken Alex
Director

Notice of Preparation

RECEIVED
JAN 14 2014
By

January 9, 2014

To: Reviewing Agencies

Re: Golden West College Vision 2020 Facilities Master Plan
SCH# 2014011015

Attached for your review and comment is the Notice of Preparation (NOP) for the Golden West College Vision 2020 Facilities Master Plan draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Jerry Marchbank
Coast Community College District
1370 Adams Avenue
Costa Mesa, CA 92626

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

Scott Morgan
Director, State Clearinghouse

E-MAILED JAN 14 2014

Attachments
cc: Lead Agency

Document Details Report
State Clearinghouse Data Base

SCH# 2014011015
Project Title Golden West College Vision 2020 Facilities Master Plan
Lead Agency Coast Community College District

Type NOP Notice of Preparation

Description The Vision 2020 Master Facilities Plan envisions program of construction of new facilities and renovation/modernization of existing buildings to better meet the college's educational goals and priorities on the Golden West College campus. In addition to new and renovated educational buildings, these upgrades include vehicular and pedestrian circulation improvements, recreational facilities that would be open for public use, the construction of a Boys and Girls Club Gymnasium and a housing/mixed-use development.

Lead Agency Contact

Name Jerry Marchbank
Agency Coast Community College District
Phone (714) 438-4731 **Fax**
email
Address 1370 Adams Avenue
City Costa Mesa **State** CA **Zip** 92626

Project Location

County Orange
City Huntington Beach
Region
Cross Streets Goldenwest Street and McFadden Avenue
Lat / Long 33° 43' 59.96" N / 118° 0' 20.48" W
Parcel No.
Township **Range** **Section** **Base**

Proximity to:

Highways I-405, SR 39
Airports
Railways
Waterways
Schools Land School
Land Use PLU: College; Z: Public; GPD: Public/Semipublic

Project Issues Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Coastal Zone; Drainage/Absorption; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Septic System; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Growth Inducing; Landuse; Cumulative Effects

Reviewing Agencies Resources Agency; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; Department of Fish and Wildlife, Region 5; Native American Heritage Commission; California Highway Patrol; Caltrans, District 12; Air Resources Board; Department of Toxic Substances Control; Regional Water Quality Control Board, Region 8

Date Received 01/09/2014 **Start of Review** 01/09/2014 **End of Review** 02/07/2014

Note: Blanks in data fields result from insufficient information provided by lead agency.

NOP Distribution List

5c

County: ORANGE

SCH# 2014011015

esources Agency

- [■] **Resources Agency**
  Nadell Gayou
- [ ] **Dept. of Boating & Waterways**
  Nicole Wong
- [ ] **California Coastal Commission**
  Elizabeth A. Fuchs
- [ ] **Colorado River Board**
  Tamya Trujillo
- [ ] **Dept. of Conservation**
  Elizabeth Carpenter
- [ ] **California Energy Commission**
  Eric Knight
- [ ] **Cal Fire**
  Dan Foster
- [ ] **Central Valley Flood Protection Board**
  James Herota
- [■] **Office of Historic Preservation**
  Ron Parsons
- [■] **Dept of Parks & Recreation**
  Environmental Stewardship Section
- [ ] **California Department of Resources, Recycling & Recovery**
  Sue O'Leary
- [ ] **S.F. Bay Conservation & Dev't. Comm.**
  Steve McAdam
- [■] **Dept. of Water Resources** Resources Agency
  Nadell Gayou

sh and Game

- [ ] **Depart. of Fish & Wildlife**
  Scott Flint
  Environmental Services Division
- [ ] **Fish & Wildlife Region 1**
  Donald Koch
- [ ] **Fish & Wildlife Region 1E**
  Laurie Harnsberger
- [ ] **Fish & Wildlife Region 2**
  Jeff Drongesen
- [ ] **Fish & Wildlife Region 3**
  Charles Armor
- [ ] **Fish & Wildlife Region 4**
  Julie Vance
- [■] **Fish & Wildlife Region 5**
  Leslie Newton-Reed
  Habitat Conservation Program
- [ ] **Fish & Wildlife Region 6**
  Gabrina Gatchel
  Habitat Conservation Program
- [ ] **Fish & Wildlife Region 6 I/M**
  Heidi Sickler
  Inyo/Mono, Habitat Conservation Program
- [ ] **Dept. of Fish & Wildlife M**
  George Isaac
  Marine Region

Other Departments

- [ ] **Food & Agriculture**
  Sandra Schubert
  Dept. of Food and Agriculture
- [ ] **Depart. of General Services**
  Public School Construction
- [ ] **Dept. of General Services**
  Anna Garbeff
  Environmental Services Section
- [ ] **Dept. of Public Health**
  Jeffery Worth
  Dept. of Health/Drinking Water
- [ ] **Delta Stewardship Council**
  Kevan Samsam

Independent Commissions,Boards

- [ ] **Delta Protection Commission**
  Michael Machado
- [ ] **Cal EMA (Emergency Management Agency)**
  Dennis Castrillo
- [■] **Native American Heritage Comm.**
  Debbie Treadway
- [ ] **Public Utilities Commission**
  Leo Wong
- [ ] **Santa Monica Bay Restoration**
  Guangyu Wang
- [ ] **State Lands Commission**
  Jennifer Deleong
- [ ] **Tahoe Regional Planning Agency (TRPA)**
  Cherry Jacques

Business, Trans & Housing

- [ ] **Caltrans - Division of Aeronautics**
  Philip Crimmins
- [ ] **Caltrans - Planning**
  Terri Pencovic
- [■] **California Highway Patrol**
  Suzann Ikeuchi
  Office of Special Projects
- [ ] **Housing & Community Development**
  CEQA Coordinator
  Housing Policy Division

Dept. of Transportation

- [ ] **Caltrans, District 1**
  Rex Jackman
- [ ] **Caltrans, District 2**
  Marcelino Gonzalez
- [ ] **Caltrans, District 3**
  Gary Arnold
- [ ] **Caltrans, District 4**
  Erik Alm
- [ ] **Caltrans, District 5**
  David Murray
- [ ] **Caltrans, District 6**
  Michael Navarro
- [ ] **Caltrans, District 7**
  Dianna Watson
- [ ] **Caltrans, District 8**
  Dan Kopulsky
- [ ] **Caltrans, District 9**
  Gayle Rosander
- [ ] **Caltrans, District 10**
  Tom Dumas
- [ ] **Caltrans, District 11**
  Jacob Armstrong
- [■] **Caltrans, District 12**
  Maureen El Harake

Cal EPA

Air Resources Board

- [■] All Projects
  CEQA Coordinator
- [ ] Transportation Projects
  Jon Taylor
- [ ] Industrial Projects
  Mike Tollstrup
- [ ] **State Water Resources Control Board**
  Regional Programs Unit
  Division of Financial Assistance
- [ ] **State Water Resources Control Board**
  Student Intern, 401 Water Quality Certification Unit
  Division of Water Quality
- [ ] **State Water Resouces Control Board**
  Phil Crader
  Division of Water Rights
- [■] **Dept. of Toxic Substances Control**
  CEQA Tracking Center
- [ ] **Department of Pesticide Regulation**
  CEQA Coordinator

Regional Water Quality Control Board (RWQCB)

- [ ] **RWQCB 1**
  Cathleen Hudson
  North Coast Region (1)
- [ ] **RWQCB 2**
  Environmental Document Coordinator
  San Francisco Bay Region (2)
- [ ] **RWQCB 3**
  Central Coast Region (3)
- [ ] **RWQCB 4**
  Teresa Rodgers
  Los Angeles Region (4)
- [ ] **RWQCB 5S**
  Central Valley Region (5)
- [ ] **RWQCB 5F**
  Central Valley Region (5)
  Fresno Branch Office
- [ ] **RWQCB 5R**
  Central Valley Region (5)
  Redding Branch Office
- [ ] **RWQCB 6**
  Lahontan Region (6)
- [ ] **RWQCB 6V**
  Lahontan Region (6)
  Victorville Branch Office
- [ ] **RWQCB 7**
  Colorado River Basin Region (7)
- [■] **RWQCB 8**
  Santa Ana Region (8)
- [ ] **RWQCB 9**
  San Diego Region (9)

- [ ] **Other** _____
- [ ] _____
  Conservancy

Last Updated 9/24/2013

RECEIVED
FEB 20 2014
By

February 17, 2014

Jerry Marchbank
Senior Director, Facilities, Planning and Construction
Coast Community College District
1370 Adams Avenue
Costa Mesa, California 92626

Subject: Notice of Preparation of a Draft Program Environmental Impact Report (PEIR) Cost Community College Project, Orange County, CA

Thank you for the opportunity to comment on the above mentioned project. We realize that the deadline for responding to the notice has expired, however, we submitted a letter December 9, 2013 regarding the CCD Vision 2020 Plan and we are happy to see that our concerns regarding the potential for the projects to impact buried archaeological resources are substantiated by the archaeological consultant. As the potentially significant impacts will be analyzed further in the PEIR, we want to make sure that we are given an opportunity to review and comment on the cultural resources sections of that document when it is completed.

In the event that archaeological resources are discovered, we request that serious consideration be given to preservation measures, such as avoidance and site burial as described in Appendix K of the CEQA Guidelines. This is important because prehistoric sites hold special significance for Native descendants and these religious and cultural values cannot be mitigated through data recovery excavations.

We also noticed that Chairperson Anthony Morales, Gabrieleno/Tongva San Gabriel Band of Mission Indians is not on your contact list. We request that he be given an opportunity to comment on the PEIR.

Sincerely,

Rebecca Robles

Rebecca Robles,
United Coalition to Protect Panhe (UCPP)
119 Avenida San Fernando
San Clemente, Ca 92672

APPENDIX B

Air Quality and GHG Emissions Calculations

CONSTRUCTION PHASE I

Annual, Summer, and Winter Emissions

Criminal Justice Training Center

Orange County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	45.47	1000sqft	1.04	45,465.00	0
Parking Lot	19.00	1000sqft	0.44	19,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - modified

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Demolition -

Grading - modified

Architectural Coating - modified SCAQMD Rule 1113

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	2.00	1.00
tblConstructionPhase	PhaseEndDate	2/26/2015	1/29/2016
tblConstructionPhase	PhaseStartDate	1/30/2015	1/4/2016
tblGrading	AcresOfGrading	3.00	1.50
tblLandUse	LandUseSquareFeet	45,470.00	45,465.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2017

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Year	tons/yr										MT/yr					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2016	0.5546	2.5001	1.9487	3.1300e-003	0.0398	0.1588	0.1985	0.0106	0.1526	0.1632	0.0000	265.4967	265.4967	0.0497	0.0000	266.5398
2017	0.0434	4.4200e-003	4.2200e-003	1.0000e-005	1.1000e-004	3.5000e-004	4.6000e-004	3.0000e-005	3.5000e-004	3.8000e-004	0.0000	0.6058	0.6058	6.0000e-005	0.0000	0.6070
Total	**0.5979**	**2.5045**	**1.9530**	**3.1400e-003**	**0.0399**	**0.1591**	**0.1990**	**0.0106**	**0.1529**	**0.1635**	**0.0000**	**266.1025**	**266.1025**	**0.0497**	**0.0000**	**267.1468**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2016	0.5546	2.5001	1.9487	3.1300e-003	0.0393	0.1588	0.1981	0.0105	0.1526	0.1631	0.0000	265.4965	265.4965	0.0497	0.0000	266.5396
2017	0.0434	4.4200e-003	4.2200e-003	1.0000e-005	1.1000e-004	3.5000e-004	4.6000e-004	3.0000e-005	3.5000e-004	3.8000e-004	0.0000	0.6058	0.6058	6.0000e-005	0.0000	0.6070
Total	**0.5979**	**2.5045**	**1.9530**	**3.1400e-003**	**0.0394**	**0.1591**	**0.1985**	**0.0106**	**0.1529**	**0.1635**	**0.0000**	**266.1023**	**266.1023**	**0.0497**	**0.0000**	**267.1466**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**1.15**	**0.00**	**0.23**	**0.47**	**0.00**	**0.03**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description

1	Site Preparation	Site Preparation	1/29/2015	1/29/2015	5	1	
2	Demolition	Demolition	1/4/2016	1/29/2016	5	20	
3	Grading	Grading	1/30/2016	2/4/2016	5	4	
4	Trenching	Trenching	2/5/2016	2/18/2016	5	10	
5	Building Construction	Building Construction	2/19/2016	11/24/2016	5	200	
6	Paving	Paving	11/25/2016	12/8/2016	5	10	
7	Architectural Coating	Architectural Coating	12/9/2016	1/5/2017	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 69,053; Non-Residential Outdoor: 23,018 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	0	8.00	174	0.41
Site Preparation	Rubber Tired Dozers	0	7.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Crawler Tractors	1	8.00	208	0.43
Demolition	Rubber Tired Dozers	0	8.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Crawler Tractors	1	6.00	208	0.43
Grading	Graders	1	6.00	174	0.41
Grading	Rubber Tired Dozers	0	6.00	255	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Trenching	Plate Compactors	1	7.00	8	0.43
Trenching	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Trenching	Trenchers	1	7.00	80	0.50
Building Construction	Cranes	1	6.00	226	0.29

Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	0	6.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	0	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	27.00	11.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Clean Paved Roads

3.2 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Demolition - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0204	0.2067	0.1145	2.0000e-004		0.0122	0.0122		0.0115	0.0115	0.0000	18.5097	18.5097	4.4800e-003	0.0000	18.6039
Total	**0.0204**	**0.2067**	**0.1145**	**2.0000e-004**	**3.0000e-005**	**0.0122**	**0.0122**	**1.0000e-005**	**0.0115**	**0.0115**	**0.0000**	**18.5097**	**18.5097**	**4.4800e-003**	**0.0000**	**18.6039**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.4000e-004	5.1000e-004	5.2800e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9895	0.9895	5.0000e-005	0.0000	0.9905
Total	**3.4000e-004**	**5.1000e-004**	**5.2800e-003**	**1.0000e-005**	**1.1000e-003**	**1.0000e-005**	**1.1100e-003**	**2.9000e-004**	**1.0000e-005**	**3.0000e-004**	**0.0000**	**0.9895**	**0.9895**	**5.0000e-005**	**0.0000**	**0.9905**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0204	0.2067	0.1144	2.0000e-004		0.0122	0.0122		0.0115	0.0115	0.0000	18.5097	18.5097	4.4800e-003	0.0000	18.6038
Total	**0.0204**	**0.2067**	**0.1144**	**2.0000e-004**	**1.0000e-005**	**0.0122**	**0.0122**	**0.0000**	**0.0115**	**0.0115**	**0.0000**	**18.5097**	**18.5097**	**4.4800e-003**	**0.0000**	**18.6038**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.4000e-004	5.1000e-004	5.2800e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9895	0.9895	5.0000e-005	0.0000	0.9905
Total	**3.4000e-004**	**5.1000e-004**	**5.2800e-003**	**1.0000e-005**	**1.1000e-003**	**1.0000e-005**	**1.1100e-003**	**2.9000e-004**	**1.0000e-005**	**3.0000e-004**	**0.0000**	**0.9895**	**0.9895**	**5.0000e-005**	**0.0000**	**0.9905**

3.4 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.0000e-004	0.0000	8.0000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1900e-003	0.0356	0.0159	3.0000e-005		1.8700e-003	1.8700e-003		1.7200e-003	1.7200e-003	0.0000	2.4866	2.4866	7.5000e-004	0.0000	2.5024
Total	**3.1900e-003**	**0.0356**	**0.0159**	**3.0000e-005**	**8.0000e-004**	**1.8700e-003**	**2.6700e-003**	**9.0000e-005**	**1.7200e-003**	**1.8100e-003**	**0.0000**	**2.4866**	**2.4866**	**7.5000e-004**	**0.0000**	**2.5024**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	8.0000e-005	8.4000e-004	0.0000	1.8000e-004	0.0000	1.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1583	0.1583	1.0000e-005	0.0000	0.1585
Total	**5.0000e-005**	**8.0000e-005**	**8.4000e-004**	**0.0000**	**1.8000e-004**	**0.0000**	**1.8000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1583**	**0.1583**	**1.0000e-005**	**0.0000**	**0.1585**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.6000e-004	0.0000	3.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1900e-003	0.0356	0.0159	3.0000e-005		1.8700e-003	1.8700e-003		1.7200e-003	1.7200e-003	0.0000	2.4866	2.4866	7.5000e-004	0.0000	2.5024
Total	**3.1900e-003**	**0.0356**	**0.0159**	**3.0000e-005**	**3.6000e-004**	**1.8700e-003**	**2.2300e-003**	**4.0000e-005**	**1.7200e-003**	**1.7600e-003**	**0.0000**	**2.4866**	**2.4866**	**7.5000e-004**	**0.0000**	**2.5024**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	8.0000e-005	8.4000e-004	0.0000	1.8000e-004	0.0000	1.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1583	0.1583	1.0000e-005	0.0000	0.1585
Total	**5.0000e-005**	**8.0000e-005**	**8.4000e-004**	**0.0000**	**1.8000e-004**	**0.0000**	**1.8000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1583**	**0.1583**	**1.0000e-005**	**0.0000**	**0.1585**

3.5 Trenching - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.5900e-003	0.0509	0.0343	4.0000e-005		3.9100e-003	3.9100e-003		3.6000e-003	3.6000e-003	0.0000	4.1339	4.1339	1.2200e-003	0.0000	4.1595
Total	**5.5900e-003**	**0.0509**	**0.0343**	**4.0000e-005**		**3.9100e-003**	**3.9100e-003**		**3.6000e-003**	**3.6000e-003**	**0.0000**	**4.1339**	**4.1339**	**1.2200e-003**	**0.0000**	**4.1595**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-004	2.5000e-004	2.6400e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4948	0.4948	2.0000e-005	0.0000	0.4953
Total	**1.7000e-004**	**2.5000e-004**	**2.6400e-003**	**1.0000e-005**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4948**	**0.4948**	**2.0000e-005**	**0.0000**	**0.4953**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.5900e-003	0.0509	0.0343	4.0000e-005		3.9100e-003	3.9100e-003		3.6000e-003	3.6000e-003	0.0000	4.1339	4.1339	1.2200e-003	0.0000	4.1595

Total	**5.5900e-003**	**0.0509**	**0.0343**	**4.0000e-005**		**3.9100e-003**	**3.9100e-003**		**3.6000e-003**	**3.6000e-003**	**0.0000**	**4.1339**	**4.1339**	**1.2200e-003**	**0.0000**	**4.1595**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-004	2.5000e-004	2.6400e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4948	0.4948	2.0000e-005	0.0000	0.4953
Total	**1.7000e-004**	**2.5000e-004**	**2.6400e-003**	**1.0000e-005**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4948**	**0.4948**	**2.0000e-005**	**0.0000**	**0.4953**

3.6 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3292	2.0546	1.4707	2.2000e-003		0.1366	0.1366		0.1318	0.1318	0.0000	185.6956	185.6956	0.0408	0.0000	186.5527
Total	**0.3292**	**2.0546**	**1.4707**	**2.2000e-003**		**0.1366**	**0.1366**		**0.1318**	**0.1318**	**0.0000**	**185.6956**	**185.6956**	**0.0408**	**0.0000**	**186.5527**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0103	0.0993	0.1297	2.4000e-004	6.7700e-003	1.5100e-003	8.2900e-003	1.9300e-003	1.3900e-003	3.3200e-003	0.0000	21.5638	21.5638	1.6000e-004	0.0000	21.5671
Worker	9.2300e-003	0.0137	0.1425	3.5000e-004	0.0296	2.1000e-004	0.0299	7.8700e-003	1.9000e-004	8.0700e-003	0.0000	26.7169	26.7169	1.3100e-003	0.0000	26.7443
Total	**0.0195**	**0.1130**	**0.2722**	**5.9000e-004**	**0.0364**	**1.7200e-003**	**0.0381**	**9.8000e-003**	**1.5800e-003**	**0.0114**	**0.0000**	**48.2807**	**48.2807**	**1.4700e-003**	**0.0000**	**48.3114**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3292	2.0546	1.4707	2.2000e-003		0.1366	0.1366		0.1318	0.1318	0.0000	185.6954	185.6954	0.0408	0.0000	186.5525
Total	**0.3292**	**2.0546**	**1.4707**	**2.2000e-003**		**0.1366**	**0.1366**		**0.1318**	**0.1318**	**0.0000**	**185.6954**	**185.6954**	**0.0408**	**0.0000**	**186.5525**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0103	0.0993	0.1297	2.4000e-004	6.7700e-003	1.5100e-003	8.2900e-003	1.9300e-003	1.3900e-003	3.3200e-003	0.0000	21.5638	21.5638	1.6000e-004	0.0000	21.5671
Worker	9.2300e-003	0.0137	0.1425	3.5000e-004	0.0296	2.1000e-004	0.0299	7.8700e-003	1.9000e-004	8.0700e-003	0.0000	26.7169	26.7169	1.3100e-003	0.0000	26.7443
Total	**0.0195**	**0.1130**	**0.2722**	**5.9000e-004**	**0.0364**	**1.7200e-003**	**0.0381**	**9.8000e-003**	**1.5800e-003**	**0.0114**	**0.0000**	**48.2807**	**48.2807**	**1.4700e-003**	**0.0000**	**48.3114**

3.7 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.7600e-003	0.0192	0.0139	2.0000e-005		9.4000e-004	9.4000e-004		8.7000e-004	8.7000e-004	0.0000	2.0619	2.0619	5.9000e-004	0.0000	2.0743
Paving	5.8000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.3400e-003**	**0.0192**	**0.0139**	**2.0000e-005**		**9.4000e-004**	**9.4000e-004**		**8.7000e-004**	**8.7000e-004**	**0.0000**	**2.0619**	**2.0619**	**5.9000e-004**	**0.0000**	**2.0743**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0000e-005	1.3000e-004	1.3200e-003	0.0000	2.7000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2474	0.2474	1.0000e-005	0.0000	0.2476
Total	**9.0000e-005**	**1.3000e-004**	**1.3200e-003**	**0.0000**	**2.7000e-004**	**0.0000**	**2.8000e-004**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**0.0000**	**0.2474**	**0.2474**	**1.0000e-005**	**0.0000**	**0.2476**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.7600e-003	0.0192	0.0139	2.0000e-005		9.4000e-004	9.4000e-004		8.7000e-004	8.7000e-004	0.0000	2.0619	2.0619	5.9000e-004	0.0000	2.0742
Paving	5.8000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.3400e-003**	**0.0192**	**0.0139**	**2.0000e-005**		**9.4000e-004**	**9.4000e-004**		**8.7000e-004**	**8.7000e-004**	**0.0000**	**2.0619**	**2.0619**	**5.9000e-004**	**0.0000**	**2.0742**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0000e-005	1.3000e-004	1.3200e-003	0.0000	2.7000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2474	0.2474	1.0000e-005	0.0000	0.2476
Total	**9.0000e-005**	**1.3000e-004**	**1.3200e-003**	**0.0000**	**2.7000e-004**	**0.0000**	**2.8000e-004**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**0.0000**	**0.2474**	**0.2474**	**1.0000e-005**	**0.0000**	**0.2476**

3.8 Architectural Coating - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1707					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9500e-003	0.0190	0.0151	2.0000e-005		1.5700e-003	1.5700e-003		1.5700e-003	1.5700e-003	0.0000	2.0426	2.0426	2.4000e-004	0.0000	2.0477
Total	**0.1737**	**0.0190**	**0.0151**	**2.0000e-005**		**1.5700e-003**	**1.5700e-003**		**1.5700e-003**	**1.5700e-003**	**0.0000**	**2.0426**	**2.0426**	**2.4000e-004**	**0.0000**	**2.0477**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4000e-004	2.0000e-004	2.1100e-003	1.0000e-005	4.4000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3958	0.3958	2.0000e-005	0.0000	0.3962
Total	**1.4000e-004**	**2.0000e-004**	**2.1100e-003**	**1.0000e-005**	**4.4000e-004**	**0.0000**	**4.4000e-004**	**1.2000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**0.3958**	**0.3958**	**2.0000e-005**	**0.0000**	**0.3962**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1707					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Off-Road	2.9500e-003	0.0190	0.0151	2.0000e-005		1.5700e-003	1.5700e-003		1.5700e-003	1.5700e-003	0.0000	2.0426	2.0426	2.4000e-004	0.0000	2.0477
Total	**0.1737**	**0.0190**	**0.0151**	**2.0000e-005**		**1.5700e-003**	**1.5700e-003**		**1.5700e-003**	**1.5700e-003**	**0.0000**	**2.0426**	**2.0426**	**2.4000e-004**	**0.0000**	**2.0477**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4000e-004	2.0000e-004	2.1100e-003	1.0000e-005	4.4000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3958	0.3958	2.0000e-005	0.0000	0.3962
Total	**1.4000e-004**	**2.0000e-004**	**2.1100e-003**	**1.0000e-005**	**4.4000e-004**	**0.0000**	**4.4000e-004**	**1.2000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**0.3958**	**0.3958**	**2.0000e-005**	**0.0000**	**0.3962**

3.8 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0427					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.6000e-004	4.3700e-003	3.7400e-003	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	0.5107	0.5107	5.0000e-005	0.0000	0.5118
Total	**0.0433**	**4.3700e-003**	**3.7400e-003**	**1.0000e-005**		**3.5000e-004**	**3.5000e-004**		**3.5000e-004**	**3.5000e-004**	**0.0000**	**0.5107**	**0.5107**	**5.0000e-005**	**0.0000**	**0.5118**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	5.0000e-005	4.8000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0951	0.0951	0.0000	0.0000	0.0952
Total	**3.0000e-005**	**5.0000e-005**	**4.8000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0951**	**0.0951**	**0.0000**	**0.0000**	**0.0952**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0427					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.6000e-004	4.3700e-003	3.7400e-003	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	0.5107	0.5107	5.0000e-005	0.0000	0.5118
Total	**0.0433**	**4.3700e-003**	**3.7400e-003**	**1.0000e-005**		**3.5000e-004**	**3.5000e-004**		**3.5000e-004**	**3.5000e-004**	**0.0000**	**0.5107**	**0.5107**	**5.0000e-005**	**0.0000**	**0.5118**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	5.0000e-005	4.8000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0951	0.0951	0.0000	0.0000	0.0952
Total	**3.0000e-005**	**5.0000e-005**	**4.8000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0951**	**0.0951**	**0.0000**	**0.0000**	**0.0952**

Criminal Justice Training Center

Orange County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	45.47	1000sqft	1.04	45,465.00	0
Parking Lot	19.00	1000sqft	0.44	19,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - modified

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Demolition -

Grading - modified

Architectural Coating - modified SCAQMD Rule 1113

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	2.00	1.00
tblConstructionPhase	PhaseEndDate	2/26/2015	1/29/2016
tblConstructionPhase	PhaseStartDate	1/30/2015	1/4/2016
tblGrading	AcresOfGrading	3.00	1.50
tblLandUse	LandUseSquareFeet	45,470.00	45,465.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2017

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Year	lb/day										lb/day					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2016	21.7234	21.6184	17.3139	0.0280	0.4871	1.3828	1.7534	0.0996	1.3334	1.4330	0.0000	2,591.8304	2,591.8304	0.4994	0.0000	2,602.3171
2017	21.6857	2.2054	2.1184	3.6500e-003	0.0559	0.1737	0.2296	0.0148	0.1737	0.1885	0.0000	335.9845	335.9845	0.0322	0.0000	336.6605
Total	**43.4091**	**23.8238**	**19.4324**	**0.0316**	**0.5430**	**1.5565**	**1.9830**	**0.1144**	**1.5071**	**1.6215**	**0.0000**	**2,927.8149**	**2,927.8149**	**0.5316**	**0.0000**	**2,938.9776**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2016	21.7234	21.6184	17.3139	0.0280	0.3705	1.3828	1.7534	0.0996	1.3334	1.4330	0.0000	2,591.8304	2,591.8304	0.4994	0.0000	2,602.3171
2017	21.6857	2.2054	2.1184	3.6500e-003	0.0559	0.1737	0.2296	0.0148	0.1737	0.1885	0.0000	335.9845	335.9845	0.0322	0.0000	336.6605
Total	**43.4091**	**23.8238**	**19.4324**	**0.0316**	**0.4264**	**1.5565**	**1.9830**	**0.1144**	**1.5071**	**1.6215**	**0.0000**	**2,927.8149**	**2,927.8149**	**0.5316**	**0.0000**	**2,938.9776**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**21.47**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description

1	Site Preparation	Site Preparation	1/29/2015	1/29/2015	5	1	
2	Demolition	Demolition	1/4/2016	1/29/2016	5	20	
3	Grading	Grading	1/30/2016	2/4/2016	5	4	
4	Trenching	Trenching	2/5/2016	2/18/2016	5	10	
5	Building Construction	Building Construction	2/19/2016	11/24/2016	5	200	
6	Paving	Paving	11/25/2016	12/8/2016	5	10	
7	Architectural Coating	Architectural Coating	12/9/2016	1/5/2017	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 69,053; Non-Residential Outdoor: 23,018 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	0	8.00	174	0.41
Site Preparation	Rubber Tired Dozers	0	7.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Crawler Tractors	1	8.00	208	0.43
Demolition	Rubber Tired Dozers	0	8.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Crawler Tractors	1	6.00	208	0.43
Grading	Graders	1	6.00	174	0.41
Grading	Rubber Tired Dozers	0	6.00	255	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Trenching	Plate Compactors	1	7.00	8	0.43
Trenching	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Trenching	Trenchers	1	7.00	80	0.50
Building Construction	Cranes	1	6.00	226	0.29

Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	0	6.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	0	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	27.00	11.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Clean Paved Roads

3.2 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000

Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Demolition - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3100e-003	0.0000	3.3100e-003	5.0000e-004	0.0000	5.0000e-004			0.0000			0.0000
Off-Road	2.0356	20.6717	11.4445	0.0202		1.2164	1.2164		1.1468	1.1468		2,040.3482	2,040.3482	0.4940		2,050.7229
Total	**2.0356**	**20.6717**	**11.4445**	**0.0202**	**3.3100e-003**	**1.2164**	**1.2197**	**5.0000e-004**	**1.1468**	**1.1473**		**2,040.3482**	**2,040.3482**	**0.4940**		**2,050.7229**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0347	0.0448	0.5490	1.3600e-003	0.1118	7.8000e-004	0.1126	0.0296	7.2000e-004	0.0304		113.4602	113.4602	5.3400e-003		113.5722
Total	**0.0347**	**0.0448**	**0.5490**	**1.3600e-003**	**0.1118**	**7.8000e-004**	**0.1126**	**0.0296**	**7.2000e-004**	**0.0304**		**113.4602**	**113.4602**	**5.3400e-003**		**113.5722**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.4900e-003	0.0000	1.4900e-003	2.3000e-004	0.0000	2.3000e-004			0.0000			0.0000
Off-Road	2.0356	20.6717	11.4445	0.0202		1.2164	1.2164		1.1468	1.1468	0.0000	2,040.3482	2,040.3482	0.4940		2,050.7229
Total	**2.0356**	**20.6717**	**11.4445**	**0.0202**	**1.4900e-003**	**1.2164**	**1.2178**	**2.3000e-004**	**1.1468**	**1.1471**	**0.0000**	**2,040.3482**	**2,040.3482**	**0.4940**		**2,050.7229**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0347	0.0448	0.5490	1.3600e-003	0.1118	7.8000e-004	0.1126	0.0296	7.2000e-004	0.0304		113.4602	113.4602	5.3400e-003		113.5722
Total	**0.0347**	**0.0448**	**0.5490**	**1.3600e-003**	**0.1118**	**7.8000e-004**	**0.1126**	**0.0296**	**7.2000e-004**	**0.0304**		**113.4602**	**113.4602**	**5.3400e-003**		**113.5722**

3.4 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3977	0.0000	0.3977	0.0429	0.0000	0.0429			0.0000			0.0000
Off-Road	1.5930	17.7878	7.9397	0.0132		0.9325	0.9325		0.8579	0.8579		1,370.5188	1,370.5188	0.4134		1,379.2002
Total	**1.5930**	**17.7878**	**7.9397**	**0.0132**	**0.3977**	**0.9325**	**1.3302**	**0.0429**	**0.8579**	**0.9009**		**1,370.5188**	**1,370.5188**	**0.4134**		**1,379.2002**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0278	0.0359	0.4392	1.0900e-003	0.0894	6.2000e-004	0.0901	0.0237	5.8000e-004	0.0243		90.7681	90.7681	4.2700e-003		90.8578
Total	**0.0278**	**0.0359**	**0.4392**	**1.0900e-003**	**0.0894**	**6.2000e-004**	**0.0901**	**0.0237**	**5.8000e-004**	**0.0243**		**90.7681**	**90.7681**	**4.2700e-003**		**90.8578**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1790	0.0000	0.1790	0.0193	0.0000	0.0193			0.0000			0.0000
Off-Road	1.5930	17.7878	7.9397	0.0132		0.9325	0.9325		0.8579	0.8579	0.0000	1,370.5188	1,370.5188	0.4134		1,379.2002
Total	**1.5930**	**17.7878**	**7.9397**	**0.0132**	**0.1790**	**0.9325**	**1.1115**	**0.0193**	**0.8579**	**0.8772**	**0.0000**	**1,370.5188**	**1,370.5188**	**0.4134**		**1,379.2002**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0278	0.0359	0.4392	1.0900e-003	0.0894	6.2000e-004	0.0901	0.0237	5.8000e-004	0.0243		90.7681	90.7681	4.2700e-003		90.8578
Total	**0.0278**	**0.0359**	**0.4392**	**1.0900e-003**	**0.0894**	**6.2000e-004**	**0.0901**	**0.0237**	**5.8000e-004**	**0.0243**		**90.7681**	**90.7681**	**4.2700e-003**		**90.8578**

3.5 Trenching - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1175	10.1769	6.8682	8.9000e-003		0.7813	0.7813		0.7195	0.7195		911.3648	911.3648	0.2689		917.0123
Total	**1.1175**	**10.1769**	**6.8682**	**8.9000e-003**		**0.7813**	**0.7813**		**0.7195**	**0.7195**		**911.3648**	**911.3648**	**0.2689**		**917.0123**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0347	0.0448	0.5490	1.3600e-003	0.1118	7.8000e-004	0.1126	0.0296	7.2000e-004	0.0304		113.4602	113.4602	5.3400e-003		113.5722
Total	**0.0347**	**0.0448**	**0.5490**	**1.3600e-003**	**0.1118**	**7.8000e-004**	**0.1126**	**0.0296**	**7.2000e-004**	**0.0304**		**113.4602**	**113.4602**	**5.3400e-003**		**113.5722**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1175	10.1769	6.8682	8.9000e-003		0.7813	0.7813		0.7195	0.7195	0.0000	911.3648	911.3648	0.2689		917.0123

Total	**1.1175**	**10.1769**	**6.8682**	**8.9000e-003**		**0.7813**	**0.7813**		**0.7195**	**0.7195**	**0.0000**	**911.3648**	**911.3648**	**0.2689**		**917.0123**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0347	0.0448	0.5490	1.3600e-003	0.1118	7.8000e-004	0.1126	0.0296	7.2000e-004	0.0304		113.4602	113.4602	5.3400e-003		113.5722
Total	**0.0347**	**0.0448**	**0.5490**	**1.3600e-003**	**0.1118**	**7.8000e-004**	**0.1126**	**0.0296**	**7.2000e-004**	**0.0304**		**113.4602**	**113.4602**	**5.3400e-003**		**113.5722**

3.6 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.2915	20.5459	14.7074	0.0220		1.3656	1.3656		1.3176	1.3176		2,046.9432	2,046.9432	0.4499		2,056.3913
Total	**3.2915**	**20.5459**	**14.7074**	**0.0220**		**1.3656**	**1.3656**		**1.3176**	**1.3176**		**2,046.9432**	**2,046.9432**	**0.4499**		**2,056.3913**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0962	0.9515	1.1243	2.3800e-003	0.0687	0.0151	0.0838	0.0196	0.0139	0.0334		238.5448	238.5448	1.6900e-003		238.5803
Worker	0.0937	0.1210	1.4822	3.6600e-003	0.3018	2.1100e-003	0.3039	0.0800	1.9400e-003	0.0820		306.3424	306.3424	0.0144		306.6450
Total	**0.1898**	**1.0725**	**2.6066**	**6.0400e-003**	**0.3705**	**0.0172**	**0.3877**	**0.0996**	**0.0158**	**0.1154**		**544.8872**	**544.8872**	**0.0161**		**545.2253**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.2915	20.5459	14.7074	0.0220		1.3656	1.3656		1.3176	1.3176	0.0000	2,046.9432	2,046.9432	0.4499		2,056.3913
Total	**3.2915**	**20.5459**	**14.7074**	**0.0220**		**1.3656**	**1.3656**		**1.3176**	**1.3176**	**0.0000**	**2,046.9432**	**2,046.9432**	**0.4499**		**2,056.3913**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0962	0.9515	1.1243	2.3800e-003	0.0687	0.0151	0.0838	0.0196	0.0139	0.0334		238.5448	238.5448	1.6900e-003		238.5803
Worker	0.0937	0.1210	1.4822	3.6600e-003	0.3018	2.1100e-003	0.3039	0.0800	1.9400e-003	0.0820		306.3424	306.3424	0.0144		306.6450
Total	**0.1898**	**1.0725**	**2.6066**	**6.0400e-003**	**0.3705**	**0.0172**	**0.3877**	**0.0996**	**0.0158**	**0.1154**		**544.8872**	**544.8872**	**0.0161**		**545.2253**

3.7 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3510	3.8441	2.7745	4.5400e-003		0.1882	0.1882		0.1740	0.1740		454.5712	454.5712	0.1296		457.2932
Paving	0.1153					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.4663**	**3.8441**	**2.7745**	**4.5400e-003**		**0.1882**	**0.1882**		**0.1740**	**0.1740**		**454.5712**	**454.5712**	**0.1296**		**457.2932**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0174	0.0224	0.2745	6.8000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.6000e-004	0.0152		56.7301	56.7301	2.6700e-003		56.7861
Total	**0.0174**	**0.0224**	**0.2745**	**6.8000e-004**	**0.0559**	**3.9000e-004**	**0.0563**	**0.0148**	**3.6000e-004**	**0.0152**		**56.7301**	**56.7301**	**2.6700e-003**		**56.7861**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3510	3.8441	2.7745	4.5400e-003		0.1882	0.1882		0.1740	0.1740	0.0000	454.5712	454.5712	0.1296		457.2932
Paving	0.1153					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.4663**	**3.8441**	**2.7745**	**4.5400e-003**		**0.1882**	**0.1882**		**0.1740**	**0.1740**	**0.0000**	**454.5712**	**454.5712**	**0.1296**		**457.2932**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0174	0.0224	0.2745	6.8000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.6000e-004	0.0152		56.7301	56.7301	2.6700e-003		56.7861
Total	**0.0174**	**0.0224**	**0.2745**	**6.8000e-004**	**0.0559**	**3.9000e-004**	**0.0563**	**0.0148**	**3.6000e-004**	**0.0152**		**56.7301**	**56.7301**	**2.6700e-003**		**56.7861**

3.8 Architectural Coating - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	21.3376					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449
Total	**21.7060**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**		**281.4481**	**281.4481**	**0.0332**		**282.1449**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0174	0.0224	0.2745	6.8000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.6000e-004	0.0152		56.7301	56.7301	2.6700e-003		56.7861
Total	**0.0174**	**0.0224**	**0.2745**	**6.8000e-004**	**0.0559**	**3.9000e-004**	**0.0563**	**0.0148**	**3.6000e-004**	**0.0152**		**56.7301**	**56.7301**	**2.6700e-003**		**56.7861**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	21.3376					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332		282.1449
Total	**21.7060**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**	**0.0000**	**281.4481**	**281.4481**	**0.0332**		**282.1449**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0174	0.0224	0.2745	6.8000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.6000e-004	0.0152		56.7301	56.7301	2.6700e-003		56.7861
Total	**0.0174**	**0.0224**	**0.2745**	**6.8000e-004**	**0.0559**	**3.9000e-004**	**0.0563**	**0.0148**	**3.6000e-004**	**0.0152**		**56.7301**	**56.7301**	**2.6700e-003**		**56.7861**

3.8 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	21.3376					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	**21.6699**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.0721**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0158	0.0204	0.2504	6.8000e-004	0.0559	3.8000e-004	0.0563	0.0148	3.5000e-004	0.0152		54.5365	54.5365	2.4800e-003		54.5884
Total	**0.0158**	**0.0204**	**0.2504**	**6.8000e-004**	**0.0559**	**3.8000e-004**	**0.0563**	**0.0148**	**3.5000e-004**	**0.0152**		**54.5365**	**54.5365**	**2.4800e-003**		**54.5884**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	21.3376					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721
Total	**21.6699**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.0721**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0158	0.0204	0.2504	6.8000e-004	0.0559	3.8000e-004	0.0563	0.0148	3.5000e-004	0.0152		54.5365	54.5365	2.4800e-003		54.5884
Total	**0.0158**	**0.0204**	**0.2504**	**6.8000e-004**	**0.0559**	**3.8000e-004**	**0.0563**	**0.0148**	**3.5000e-004**	**0.0152**		**54.5365**	**54.5365**	**2.4800e-003**		**54.5884**

Criminal Justice Training Center

Orange County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	45.47	1000sqft	1.04	45,465.00	0
Parking Lot	19.00	1000sqft	0.44	19,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - modified

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Demolition -

Grading - modified

Architectural Coating - modified SCAQMD Rule 1113

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	2.00	1.00
tblConstructionPhase	PhaseEndDate	2/26/2015	1/29/2016
tblConstructionPhase	PhaseStartDate	1/30/2015	1/4/2016
tblGrading	AcresOfGrading	3.00	1.50
tblLandUse	LandUseSquareFeet	45,470.00	45,465.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2017

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Year	lb/day										lb/day					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2016	21.7243	21.6529	17.4548	0.0278	0.4871	1.3830	1.7535	0.0996	1.3335	1.4331	0.0000	2,573.6099	2,573.6099	0.4994	0.0000	2,584.0966
2017	21.6865	2.2074	2.1032	3.6100e-003	0.0559	0.1737	0.2296	0.0148	0.1737	0.1885	0.0000	333.0966	333.0966	0.0322	0.0000	333.7726
Total	**43.4108**	**23.8603**	**19.5580**	**0.0314**	**0.5430**	**1.5567**	**1.9831**	**0.1144**	**1.5072**	**1.6216**	**0.0000**	**2,906.7065**	**2,906.7065**	**0.5316**	**0.0000**	**2,917.8692**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2016	21.7243	21.6529	17.4548	0.0278	0.3705	1.3830	1.7535	0.0996	1.3335	1.4331	0.0000	2,573.6099	2,573.6099	0.4994	0.0000	2,584.0966
2017	21.6865	2.2074	2.1032	3.6100e-003	0.0559	0.1737	0.2296	0.0148	0.1737	0.1885	0.0000	333.0966	333.0966	0.0322	0.0000	333.7726
Total	**43.4108**	**23.8603**	**19.5580**	**0.0314**	**0.4264**	**1.5567**	**1.9831**	**0.1144**	**1.5072**	**1.6216**	**0.0000**	**2,906.7065**	**2,906.7065**	**0.5316**	**0.0000**	**2,917.8692**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**21.47**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description

1	Site Preparation	Site Preparation	1/29/2015	1/29/2015	5	1	
2	Demolition	Demolition	1/4/2016	1/29/2016	5	20	
3	Grading	Grading	1/30/2016	2/4/2016	5	4	
4	Trenching	Trenching	2/5/2016	2/18/2016	5	10	
5	Building Construction	Building Construction	2/19/2016	11/24/2016	5	200	
6	Paving	Paving	11/25/2016	12/8/2016	5	10	
7	Architectural Coating	Architectural Coating	12/9/2016	1/5/2017	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 69,053; Non-Residential Outdoor: 23,018 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	0	8.00	174	0.41
Site Preparation	Rubber Tired Dozers	0	7.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Crawler Tractors	1	8.00	208	0.43
Demolition	Rubber Tired Dozers	0	8.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Crawler Tractors	1	6.00	208	0.43
Grading	Graders	1	6.00	174	0.41
Grading	Rubber Tired Dozers	0	6.00	255	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Trenching	Plate Compactors	1	7.00	8	0.43
Trenching	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Trenching	Trenchers	1	7.00	80	0.50
Building Construction	Cranes	1	6.00	226	0.29

Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	0	6.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	0	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	27.00	11.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Clean Paved Roads

3.2 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000

Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Demolition - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3100e-003	0.0000	3.3100e-003	5.0000e-004	0.0000	5.0000e-004			0.0000			0.0000
Off-Road	2.0356	20.6717	11.4445	0.0202		1.2164	1.2164		1.1468	1.1468		2,040.3482	2,040.3482	0.4940		2,050.7229
Total	**2.0356**	**20.6717**	**11.4445**	**0.0202**	**3.3100e-003**	**1.2164**	**1.2197**	**5.0000e-004**	**1.1468**	**1.1473**		**2,040.3482**	**2,040.3482**	**0.4940**		**2,050.7229**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0365	0.0493	0.5171	1.2800e-003	0.1118	7.8000e-004	0.1126	0.0296	7.2000e-004	0.0304		107.4568	107.4568	5.3400e-003		107.5688
Total	**0.0365**	**0.0493**	**0.5171**	**1.2800e-003**	**0.1118**	**7.8000e-004**	**0.1126**	**0.0296**	**7.2000e-004**	**0.0304**		**107.4568**	**107.4568**	**5.3400e-003**		**107.5688**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.4900e-003	0.0000	1.4900e-003	2.3000e-004	0.0000	2.3000e-004			0.0000			0.0000
Off-Road	2.0356	20.6717	11.4445	0.0202		1.2164	1.2164		1.1468	1.1468	0.0000	2,040.3482	2,040.3482	0.4940		2,050.7229
Total	**2.0356**	**20.6717**	**11.4445**	**0.0202**	**1.4900e-003**	**1.2164**	**1.2178**	**2.3000e-004**	**1.1468**	**1.1471**	**0.0000**	**2,040.3482**	**2,040.3482**	**0.4940**		**2,050.7229**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0365	0.0493	0.5171	1.2800e-003	0.1118	7.8000e-004	0.1126	0.0296	7.2000e-004	0.0304		107.4568	107.4568	5.3400e-003		107.5688
Total	**0.0365**	**0.0493**	**0.5171**	**1.2800e-003**	**0.1118**	**7.8000e-004**	**0.1126**	**0.0296**	**7.2000e-004**	**0.0304**		**107.4568**	**107.4568**	**5.3400e-003**		**107.5688**

3.4 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3977	0.0000	0.3977	0.0429	0.0000	0.0429			0.0000			0.0000
Off-Road	1.5930	17.7878	7.9397	0.0132		0.9325	0.9325		0.8579	0.8579		1,370.5188	1,370.5188	0.4134		1,379.2002
Total	**1.5930**	**17.7878**	**7.9397**	**0.0132**	**0.3977**	**0.9325**	**1.3302**	**0.0429**	**0.8579**	**0.9009**		**1,370.5188**	**1,370.5188**	**0.4134**		**1,379.2002**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0292	0.0394	0.4137	1.0300e-003	0.0894	6.2000e-004	0.0901	0.0237	5.8000e-004	0.0243		85.9654	85.9654	4.2700e-003		86.0551
Total	**0.0292**	**0.0394**	**0.4137**	**1.0300e-003**	**0.0894**	**6.2000e-004**	**0.0901**	**0.0237**	**5.8000e-004**	**0.0243**		**85.9654**	**85.9654**	**4.2700e-003**		**86.0551**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1790	0.0000	0.1790	0.0193	0.0000	0.0193			0.0000			0.0000
Off-Road	1.5930	17.7878	7.9397	0.0132		0.9325	0.9325		0.8579	0.8579	0.0000	1,370.5188	1,370.5188	0.4134		1,379.2002
Total	**1.5930**	**17.7878**	**7.9397**	**0.0132**	**0.1790**	**0.9325**	**1.1115**	**0.0193**	**0.8579**	**0.8772**	**0.0000**	**1,370.5188**	**1,370.5188**	**0.4134**		**1,379.2002**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0292	0.0394	0.4137	1.0300e-003	0.0894	6.2000e-004	0.0901	0.0237	5.8000e-004	0.0243		85.9654	85.9654	4.2700e-003		86.0551
Total	**0.0292**	**0.0394**	**0.4137**	**1.0300e-003**	**0.0894**	**6.2000e-004**	**0.0901**	**0.0237**	**5.8000e-004**	**0.0243**		**85.9654**	**85.9654**	**4.2700e-003**		**86.0551**

3.5 Trenching - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1175	10.1769	6.8682	8.9000e-003		0.7813	0.7813		0.7195	0.7195		911.3648	911.3648	0.2689		917.0123
Total	**1.1175**	**10.1769**	**6.8682**	**8.9000e-003**		**0.7813**	**0.7813**		**0.7195**	**0.7195**		**911.3648**	**911.3648**	**0.2689**		**917.0123**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0365	0.0493	0.5171	1.2800e-003	0.1118	7.8000e-004	0.1126	0.0296	7.2000e-004	0.0304		107.4568	107.4568	5.3400e-003		107.5688
Total	**0.0365**	**0.0493**	**0.5171**	**1.2800e-003**	**0.1118**	**7.8000e-004**	**0.1126**	**0.0296**	**7.2000e-004**	**0.0304**		**107.4568**	**107.4568**	**5.3400e-003**		**107.5688**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1175	10.1769	6.8682	8.9000e-003		0.7813	0.7813		0.7195	0.7195	0.0000	911.3648	911.3648	0.2689		917.0123

Total	**1.1175**	**10.1769**	**6.8682**	**8.9000e-003**		**0.7813**	**0.7813**		**0.7195**	**0.7195**	**0.0000**	**911.3648**	**911.3648**	**0.2689**		**917.0123**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0365	0.0493	0.5171	1.2800e-003	0.1118	7.8000e-004	0.1126	0.0296	7.2000e-004	0.0304		107.4568	107.4568	5.3400e-003		107.5688
Total	**0.0365**	**0.0493**	**0.5171**	**1.2800e-003**	**0.1118**	**7.8000e-004**	**0.1126**	**0.0296**	**7.2000e-004**	**0.0304**		**107.4568**	**107.4568**	**5.3400e-003**		**107.5688**

3.6 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.2915	20.5459	14.7074	0.0220		1.3656	1.3656		1.3176	1.3176		2,046.9432	2,046.9432	0.4499		2,056.3913
Total	**3.2915**	**20.5459**	**14.7074**	**0.0220**		**1.3656**	**1.3656**		**1.3176**	**1.3176**		**2,046.9432**	**2,046.9432**	**0.4499**		**2,056.3913**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1066	0.9739	1.3512	2.3600e-003	0.0687	0.0152	0.0840	0.0196	0.0140	0.0336		236.5334	236.5334	1.7400e-003		236.5700
Worker	0.0986	0.1331	1.3962	3.4700e-003	0.3018	2.1100e-003	0.3039	0.0800	1.9400e-003	0.0820		290.1333	290.1333	0.0144		290.4358
Total	**0.2052**	**1.1070**	**2.7474**	**5.8300e-003**	**0.3705**	**0.0174**	**0.3879**	**0.0996**	**0.0160**	**0.1156**		**526.6667**	**526.6667**	**0.0162**		**527.0059**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.2915	20.5459	14.7074	0.0220		1.3656	1.3656		1.3176	1.3176	0.0000	2,046.9432	2,046.9432	0.4499		2,056.3913
Total	**3.2915**	**20.5459**	**14.7074**	**0.0220**		**1.3656**	**1.3656**		**1.3176**	**1.3176**	**0.0000**	**2,046.9432**	**2,046.9432**	**0.4499**		**2,056.3913**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1066	0.9739	1.3512	2.3600e-003	0.0687	0.0152	0.0840	0.0196	0.0140	0.0336		236.5334	236.5334	1.7400e-003		236.5700
Worker	0.0986	0.1331	1.3962	3.4700e-003	0.3018	2.1100e-003	0.3039	0.0800	1.9400e-003	0.0820		290.1333	290.1333	0.0144		290.4358
Total	**0.2052**	**1.1070**	**2.7474**	**5.8300e-003**	**0.3705**	**0.0174**	**0.3879**	**0.0996**	**0.0160**	**0.1156**		**526.6667**	**526.6667**	**0.0162**		**527.0059**

3.7 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3510	3.8441	2.7745	4.5400e-003		0.1882	0.1882		0.1740	0.1740		454.5712	454.5712	0.1296		457.2932
Paving	0.1153					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.4663**	**3.8441**	**2.7745**	**4.5400e-003**		**0.1882**	**0.1882**		**0.1740**	**0.1740**		**454.5712**	**454.5712**	**0.1296**		**457.2932**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0183	0.0247	0.2586	6.4000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.6000e-004	0.0152		53.7284	53.7284	2.6700e-003		53.7844
Total	**0.0183**	**0.0247**	**0.2586**	**6.4000e-004**	**0.0559**	**3.9000e-004**	**0.0563**	**0.0148**	**3.6000e-004**	**0.0152**		**53.7284**	**53.7284**	**2.6700e-003**		**53.7844**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3510	3.8441	2.7745	4.5400e-003		0.1882	0.1882		0.1740	0.1740	0.0000	454.5712	454.5712	0.1296		457.2932
Paving	0.1153					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.4663**	**3.8441**	**2.7745**	**4.5400e-003**		**0.1882**	**0.1882**		**0.1740**	**0.1740**	**0.0000**	**454.5712**	**454.5712**	**0.1296**		**457.2932**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0183	0.0247	0.2586	6.4000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.6000e-004	0.0152		53.7284	53.7284	2.6700e-003		53.7844
Total	**0.0183**	**0.0247**	**0.2586**	**6.4000e-004**	**0.0559**	**3.9000e-004**	**0.0563**	**0.0148**	**3.6000e-004**	**0.0152**		**53.7284**	**53.7284**	**2.6700e-003**		**53.7844**

3.8 Architectural Coating - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	21.3376					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449
Total	**21.7060**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**		**281.4481**	**281.4481**	**0.0332**		**282.1449**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0183	0.0247	0.2586	6.4000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.6000e-004	0.0152		53.7284	53.7284	2.6700e-003		53.7844
Total	**0.0183**	**0.0247**	**0.2586**	**6.4000e-004**	**0.0559**	**3.9000e-004**	**0.0563**	**0.0148**	**3.6000e-004**	**0.0152**		**53.7284**	**53.7284**	**2.6700e-003**		**53.7844**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	21.3376					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332		282.1449
Total	**21.7060**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**	**0.0000**	**281.4481**	**281.4481**	**0.0332**		**282.1449**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0183	0.0247	0.2586	6.4000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.6000e-004	0.0152		53.7284	53.7284	2.6700e-003		53.7844
Total	**0.0183**	**0.0247**	**0.2586**	**6.4000e-004**	**0.0559**	**3.9000e-004**	**0.0563**	**0.0148**	**3.6000e-004**	**0.0152**		**53.7284**	**53.7284**	**2.6700e-003**		**53.7844**

3.8 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	21.3376					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	**21.6699**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.0721**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0166	0.0224	0.2351	6.4000e-004	0.0559	3.8000e-004	0.0563	0.0148	3.5000e-004	0.0152		51.6485	51.6485	2.4800e-003		51.7005
Total	**0.0166**	**0.0224**	**0.2351**	**6.4000e-004**	**0.0559**	**3.8000e-004**	**0.0563**	**0.0148**	**3.5000e-004**	**0.0152**		**51.6485**	**51.6485**	**2.4800e-003**		**51.7005**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	21.3376					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721
Total	**21.6699**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.0721**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0166	0.0224	0.2351	6.4000e-004	0.0559	3.8000e-004	0.0563	0.0148	3.5000e-004	0.0152		51.6485	51.6485	2.4800e-003		51.7005
Total	**0.0166**	**0.0224**	**0.2351**	**6.4000e-004**	**0.0559**	**3.8000e-004**	**0.0563**	**0.0148**	**3.5000e-004**	**0.0152**		**51.6485**	**51.6485**	**2.4800e-003**		**51.7005**

Math/Science Building

Orange County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	110.99	1000sqft	2.55	110,990.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - modified

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Demolition -

Grading - modified

Architectural Coating - modified

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	3.00	1.00
tblConstructionPhase	PhaseEndDate	2/26/2015	6/28/2016
tblConstructionPhase	PhaseStartDate	1/30/2015	6/1/2016
tblGrading	AcresOfGrading	6.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2017

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					

2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2016	0.2711	1.9107	1.4603	2.4200e-003	0.0549	0.1178	0.1727	0.0129	0.1123	0.1252	0.0000	207.3839	207.3839	0.0379	0.0000	208.1796
2017	0.7067	1.3047	1.0950	1.8700e-003	0.0335	0.0792	0.1128	9.0200e-003	0.0759	0.0849	0.0000	155.7226	155.7226	0.0264	0.0000	156.2765
Total	**0.9778**	**3.2154**	**2.5553**	**4.2900e-003**	**0.0884**	**0.1971**	**0.2855**	**0.0219**	**0.1881**	**0.2101**	**0.0000**	**363.1065**	**363.1065**	**0.0643**	**0.0000**	**364.4561**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2016	0.2711	1.9107	1.4603	2.4200e-003	0.0465	0.1178	0.1644	0.0117	0.1123	0.1240	0.0000	207.3837	207.3837	0.0379	0.0000	208.1794
2017	0.7067	1.3047	1.0950	1.8700e-003	0.0335	0.0792	0.1128	9.0200e-003	0.0759	0.0849	0.0000	155.7225	155.7225	0.0264	0.0000	156.2763
Total	**0.9778**	**3.2154**	**2.5553**	**4.2900e-003**	**0.0801**	**0.1971**	**0.2772**	**0.0207**	**0.1881**	**0.2088**	**0.0000**	**363.1062**	**363.1062**	**0.0643**	**0.0000**	**364.4557**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**9.42**	**0.00**	**2.92**	**5.56**	**0.00**	**0.58**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/29/2015	1/29/2015	5	1	

2	Demolition	Demolition	6/1/2016	6/28/2016	5	20	
3	Grading	Grading	6/29/2016	7/6/2016	5	6	
4	Trenching	Trenching	7/7/2016	7/20/2016	5	10	
5	Building Construction	Building Construction	7/21/2016	5/24/2017	5	220	
6	Paving	Paving	5/25/2017	6/7/2017	5	10	
7	Architectural Coating	Architectural Coating	6/8/2017	7/5/2017	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 3

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 166,485; Non-Residential Outdoor: 55,495 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	0	8.00	174	0.41
Site Preparation	Scrapers	0	8.00	361	0.48
Site Preparation	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Crawler Tractors	1	8.00	208	0.43
Demolition	Rubber Tired Dozers	0	8.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Crawler Tractors	1	8.00	208	0.43
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	0	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Trenching	Plate Compactors	1	8.00	8	0.43
Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Trenchers	1	8.00	80	0.50
Building Construction	Cranes	1	8.00	226	0.29
Building Construction	Forklifts	2	7.00	89	0.20

Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	0	8.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	0	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	10.00	0.00	125.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	47.00	18.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	9.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Clean Paved Roads

3.2 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Demolition - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0136	0.0000	0.0136	2.0500e-003	0.0000	2.0500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0204	0.2067	0.1145	2.0000e-004		0.0122	0.0122		0.0115	0.0115	0.0000	18.5097	18.5097	4.4800e-003	0.0000	18.6039
Total	**0.0204**	**0.2067**	**0.1145**	**2.0000e-004**	**0.0136**	**0.0122**	**0.0257**	**2.0500e-003**	**0.0115**	**0.0135**	**0.0000**	**18.5097**	**18.5097**	**4.4800e-003**	**0.0000**	**18.6039**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.1900e-003	0.0181	0.0139	5.0000e-005	1.0700e-003	2.6000e-004	1.3300e-003	2.9000e-004	2.4000e-004	5.3000e-004	0.0000	4.1991	4.1991	3.0000e-005	0.0000	4.1998
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.4000e-004	5.1000e-004	5.2800e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9895	0.9895	5.0000e-005	0.0000	0.9905
Total	**1.5300e-003**	**0.0186**	**0.0192**	**6.0000e-005**	**2.1700e-003**	**2.7000e-004**	**2.4400e-003**	**5.8000e-004**	**2.5000e-004**	**8.3000e-004**	**0.0000**	**5.1886**	**5.1886**	**8.0000e-005**	**0.0000**	**5.1903**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.1000e-003	0.0000	6.1000e-003	9.2000e-004	0.0000	9.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0204	0.2067	0.1144	2.0000e-004		0.0122	0.0122		0.0115	0.0115	0.0000	18.5097	18.5097	4.4800e-003	0.0000	18.6038
Total	**0.0204**	**0.2067**	**0.1144**	**2.0000e-004**	**6.1000e-003**	**0.0122**	**0.0183**	**9.2000e-004**	**0.0115**	**0.0124**	**0.0000**	**18.5097**	**18.5097**	**4.4800e-003**	**0.0000**	**18.6038**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	1.1900e-003	0.0181	0.0139	5.0000e-005	1.0700e-003	2.6000e-004	1.3300e-003	2.9000e-004	2.4000e-004	5.3000e-004	0.0000	4.1991	4.1991	3.0000e-005	0.0000	4.1998
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.4000e-004	5.1000e-004	5.2800e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9895	0.9895	5.0000e-005	0.0000	0.9905
Total	**1.5300e-003**	**0.0186**	**0.0192**	**6.0000e-005**	**2.1700e-003**	**2.7000e-004**	**2.4400e-003**	**5.8000e-004**	**2.5000e-004**	**8.3000e-004**	**0.0000**	**5.1886**	**5.1886**	**8.0000e-005**	**0.0000**	**5.1903**

3.4 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.5900e-003	0.0000	1.5900e-003	1.7000e-004	0.0000	1.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.9700e-003	0.0769	0.0360	6.0000e-005		4.1700e-003	4.1700e-003		3.8400e-003	3.8400e-003	0.0000	5.4871	5.4871	1.6600e-003	0.0000	5.5219
Total	**6.9700e-003**	**0.0769**	**0.0360**	**6.0000e-005**	**1.5900e-003**	**4.1700e-003**	**5.7600e-003**	**1.7000e-004**	**3.8400e-003**	**4.0100e-003**	**0.0000**	**5.4871**	**5.4871**	**1.6600e-003**	**0.0000**	**5.5219**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	1.5000e-004	1.5800e-003	0.0000	3.3000e-004	0.0000	3.3000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2969	0.2969	1.0000e-005	0.0000	0.2972
Total	**1.0000e-004**	**1.5000e-004**	**1.5800e-003**	**0.0000**	**3.3000e-004**	**0.0000**	**3.3000e-004**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**0.0000**	**0.2969**	**0.2969**	**1.0000e-005**	**0.0000**	**0.2972**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.2000e-004	0.0000	7.2000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.9700e-003	0.0769	0.0360	6.0000e-005		4.1700e-003	4.1700e-003		3.8400e-003	3.8400e-003	0.0000	5.4871	5.4871	1.6600e-003	0.0000	5.5219
Total	**6.9700e-003**	**0.0769**	**0.0360**	**6.0000e-005**	**7.2000e-004**	**4.1700e-003**	**4.8900e-003**	**8.0000e-005**	**3.8400e-003**	**3.9200e-003**	**0.0000**	**5.4871**	**5.4871**	**1.6600e-003**	**0.0000**	**5.5219**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	1.5000e-004	1.5800e-003	0.0000	3.3000e-004	0.0000	3.3000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2969	0.2969	1.0000e-005	0.0000	0.2972
Total	**1.0000e-004**	**1.5000e-004**	**1.5800e-003**	**0.0000**	**3.3000e-004**	**0.0000**	**3.3000e-004**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**0.0000**	**0.2969**	**0.2969**	**1.0000e-005**	**0.0000**	**0.2972**

3.5 Trenching - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.3900e-003	0.0582	0.0393	5.0000e-005		4.4600e-003	4.4600e-003		4.1100e-003	4.1100e-003	0.0000	4.7244	4.7244	1.3900e-003	0.0000	4.7537
Total	**6.3900e-003**	**0.0582**	**0.0393**	**5.0000e-005**		**4.4600e-003**	**4.4600e-003**		**4.1100e-003**	**4.1100e-003**	**0.0000**	**4.7244**	**4.7244**	**1.3900e-003**	**0.0000**	**4.7537**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-004	2.5000e-004	2.6400e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4948	0.4948	2.0000e-005	0.0000	0.4953
Total	**1.7000e-004**	**2.5000e-004**	**2.6400e-003**	**1.0000e-005**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4948**	**0.4948**	**2.0000e-005**	**0.0000**	**0.4953**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.3900e-003	0.0582	0.0393	5.0000e-005		4.4600e-003	4.4600e-003		4.1100e-003	4.1100e-003	0.0000	4.7244	4.7244	1.3900e-003	0.0000	4.7537

Total	**6.3900e-003**	**0.0582**	**0.0393**	**5.0000e-005**		**4.4600e-003**	**4.4600e-003**		**4.1100e-003**	**4.1100e-003**	**0.0000**	**4.7244**	**4.7244**	**1.3900e-003**	**0.0000**	**4.7537**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-004	2.5000e-004	2.6400e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4948	0.4948	2.0000e-005	0.0000	0.4953
Total	**1.7000e-004**	**2.5000e-004**	**2.6400e-003**	**1.0000e-005**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4948**	**0.4948**	**2.0000e-005**	**0.0000**	**0.4953**

3.6 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2164	1.4410	0.9779	1.4600e-003		0.0951	0.0951		0.0911	0.0911	0.0000	124.8332	124.8332	0.0288	0.0000	125.4373
Total	**0.2164**	**1.4410**	**0.9779**	**1.4600e-003**		**0.0951**	**0.0951**		**0.0911**	**0.0911**	**0.0000**	**124.8332**	**124.8332**	**0.0288**	**0.0000**	**125.4373**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.8400e-003	0.0951	0.1242	2.3000e-004	6.4800e-003	1.4500e-003	7.9300e-003	1.8500e-003	1.3300e-003	3.1800e-003	0.0000	20.6424	20.6424	1.5000e-004	0.0000	20.6456
Worker	9.3900e-003	0.0139	0.1451	3.6000e-004	0.0302	2.1000e-004	0.0304	8.0200e-003	2.0000e-004	8.2100e-003	0.0000	27.2067	27.2067	1.3300e-003	0.0000	27.2346
Total	**0.0192**	**0.1090**	**0.2693**	**5.9000e-004**	**0.0367**	**1.6600e-003**	**0.0383**	**9.8700e-003**	**1.5300e-003**	**0.0114**	**0.0000**	**47.8491**	**47.8491**	**1.4800e-003**	**0.0000**	**47.8802**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2164	1.4410	0.9779	1.4600e-003		0.0951	0.0951		0.0911	0.0911	0.0000	124.8331	124.8331	0.0288	0.0000	125.4371
Total	**0.2164**	**1.4410**	**0.9779**	**1.4600e-003**		**0.0951**	**0.0951**		**0.0911**	**0.0911**	**0.0000**	**124.8331**	**124.8331**	**0.0288**	**0.0000**	**125.4371**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.8400e-003	0.0951	0.1242	2.3000e-004	6.4800e-003	1.4500e-003	7.9300e-003	1.8500e-003	1.3300e-003	3.1800e-003	0.0000	20.6424	20.6424	1.5000e-004	0.0000	20.6456
Worker	9.3900e-003	0.0139	0.1451	3.6000e-004	0.0302	2.1000e-004	0.0304	8.0200e-003	2.0000e-004	8.2100e-003	0.0000	27.2067	27.2067	1.3300e-003	0.0000	27.2346
Total	**0.0192**	**0.1090**	**0.2693**	**5.9000e-004**	**0.0367**	**1.6600e-003**	**0.0383**	**9.8700e-003**	**1.5300e-003**	**0.0114**	**0.0000**	**47.8491**	**47.8491**	**1.4800e-003**	**0.0000**	**47.8802**

3.6 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1714	1.1772	0.8368	1.2800e-003		0.0753	0.0753		0.0721	0.0721	0.0000	109.0842	109.0842	0.0242	0.0000	109.5934
Total	**0.1714**	**1.1772**	**0.8368**	**1.2800e-003**		**0.0753**	**0.0753**		**0.0721**	**0.0721**	**0.0000**	**109.0842**	**109.0842**	**0.0242**	**0.0000**	**109.5934**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.9700e-003	0.0761	0.1035	2.0000e-004	5.7100e-003	1.1400e-003	6.8500e-003	1.6300e-003	1.0500e-003	2.6800e-003	0.0000	17.8765	17.8765	1.3000e-004	0.0000	17.8791
Worker	7.5100e-003	0.0111	0.1163	3.2000e-004	0.0266	1.8000e-004	0.0268	7.0600e-003	1.7000e-004	7.2300e-003	0.0000	23.0243	23.0243	1.0900e-003	0.0000	23.0471
Total	**0.0155**	**0.0872**	**0.2197**	**5.2000e-004**	**0.0323**	**1.3200e-003**	**0.0336**	**8.6900e-003**	**1.2200e-003**	**9.9100e-003**	**0.0000**	**40.9008**	**40.9008**	**1.2200e-003**	**0.0000**	**40.9263**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1714	1.1772	0.8368	1.2800e-003		0.0753	0.0753		0.0721	0.0721	0.0000	109.0841	109.0841	0.0242	0.0000	109.5932
Total	**0.1714**	**1.1772**	**0.8368**	**1.2800e-003**		**0.0753**	**0.0753**		**0.0721**	**0.0721**	**0.0000**	**109.0841**	**109.0841**	**0.0242**	**0.0000**	**109.5932**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.9700e-003	0.0761	0.1035	2.0000e-004	5.7100e-003	1.1400e-003	6.8500e-003	1.6300e-003	1.0500e-003	2.6800e-003	0.0000	17.8765	17.8765	1.3000e-004	0.0000	17.8791
Worker	7.5100e-003	0.0111	0.1163	3.2000e-004	0.0266	1.8000e-004	0.0268	7.0600e-003	1.7000e-004	7.2300e-003	0.0000	23.0243	23.0243	1.0900e-003	0.0000	23.0471
Total	**0.0155**	**0.0872**	**0.2197**	**5.2000e-004**	**0.0323**	**1.3200e-003**	**0.0336**	**8.6900e-003**	**1.2200e-003**	**9.9100e-003**	**0.0000**	**40.9008**	**40.9008**	**1.2200e-003**	**0.0000**	**40.9263**

3.7 Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.7100e-003	0.0179	0.0142	2.0000e-005		8.8000e-004	8.8000e-004		8.1000e-004	8.1000e-004	0.0000	2.0905	2.0905	5.9000e-004	0.0000	2.1029
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.7100e-003**	**0.0179**	**0.0142**	**2.0000e-005**		**8.8000e-004**	**8.8000e-004**		**8.1000e-004**	**8.1000e-004**	**0.0000**	**2.0905**	**2.0905**	**5.9000e-004**	**0.0000**	**2.1029**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.0000e-005	1.1000e-004	1.2000e-003	0.0000	2.7000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2378	0.2378	1.0000e-005	0.0000	0.2380
Total	**8.0000e-005**	**1.1000e-004**	**1.2000e-003**	**0.0000**	**2.7000e-004**	**0.0000**	**2.8000e-004**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**0.0000**	**0.2378**	**0.2378**	**1.0000e-005**	**0.0000**	**0.2380**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.7100e-003	0.0179	0.0142	2.0000e-005		8.8000e-004	8.8000e-004		8.1000e-004	8.1000e-004	0.0000	2.0905	2.0905	5.9000e-004	0.0000	2.1029

Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.7100e-003**	**0.0179**	**0.0142**	**2.0000e-005**		**8.8000e-004**	**8.8000e-004**		**8.1000e-004**	**8.1000e-004**	**0.0000**	**2.0905**	**2.0905**	**5.9000e-004**	**0.0000**	**2.1029**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.0000e-005	1.1000e-004	1.2000e-003	0.0000	2.7000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2378	0.2378	1.0000e-005	0.0000	0.2380
Total	**8.0000e-005**	**1.1000e-004**	**1.2000e-003**	**0.0000**	**2.7000e-004**	**0.0000**	**2.8000e-004**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**0.0000**	**0.2378**	**0.2378**	**1.0000e-005**	**0.0000**	**0.2380**

3.8 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5144					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.3200e-003	0.0219	0.0187	3.0000e-005		1.7300e-003	1.7300e-003		1.7300e-003	1.7300e-003	0.0000	2.5533	2.5533	2.7000e-004	0.0000	2.5589
Total	**0.5178**	**0.0219**	**0.0187**	**3.0000e-005**		**1.7300e-003**	**1.7300e-003**		**1.7300e-003**	**1.7300e-003**	**0.0000**	**2.5533**	**2.5533**	**2.7000e-004**	**0.0000**	**2.5589**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	4.1000e-004	4.3200e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8561	0.8561	4.0000e-005	0.0000	0.8570
Total	**2.8000e-004**	**4.1000e-004**	**4.3200e-003**	**1.0000e-005**	**9.9000e-004**	**1.0000e-005**	**9.9000e-004**	**2.6000e-004**	**1.0000e-005**	**2.7000e-004**	**0.0000**	**0.8561**	**0.8561**	**4.0000e-005**	**0.0000**	**0.8570**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5144					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.3200e-003	0.0219	0.0187	3.0000e-005		1.7300e-003	1.7300e-003		1.7300e-003	1.7300e-003	0.0000	2.5533	2.5533	2.7000e-004	0.0000	2.5589
Total	**0.5178**	**0.0219**	**0.0187**	**3.0000e-005**		**1.7300e-003**	**1.7300e-003**		**1.7300e-003**	**1.7300e-003**	**0.0000**	**2.5533**	**2.5533**	**2.7000e-004**	**0.0000**	**2.5589**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	4.1000e-004	4.3200e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8561	0.8561	4.0000e-005	0.0000	0.8570
Total	**2.8000e-004**	**4.1000e-004**	**4.3200e-003**	**1.0000e-005**	**9.9000e-004**	**1.0000e-005**	**9.9000e-004**	**2.6000e-004**	**1.0000e-005**	**2.7000e-004**	**0.0000**	**0.8561**	**0.8561**	**4.0000e-005**	**0.0000**	**0.8570**

Math/Science Building

Orange County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	110.99	1000sqft	2.55	110,990.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - modified

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Demolition -

Grading - modified

Architectural Coating - modified

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	3.00	1.00
tblConstructionPhase	PhaseEndDate	2/26/2015	6/28/2016
tblConstructionPhase	PhaseStartDate	1/30/2015	6/1/2016
tblGrading	AcresOfGrading	6.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2017

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					

2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2016	4.0189	26.3997	21.1366	0.0352	1.5762	1.6541	2.8192	0.2647	1.5829	1.7543	0.0000	3,275.8326	3,275.8326	0.6135	0.0000	3,288.7157
2017	51.8046	24.4663	20.3335	0.0352	0.6379	1.4877	2.1256	0.1714	1.4234	1.5948	0.0000	3,231.4856	3,231.4856	0.5449	0.0000	3,242.9282
Total	**55.8235**	**50.8661**	**41.4701**	**0.0703**	**2.2141**	**3.1418**	**4.9448**	**0.4361**	**3.0063**	**3.3490**	**0.0000**	**6,507.3181**	**6,507.3181**	**1.1584**	**0.0000**	**6,531.6439**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2016	4.0189	26.3997	21.1366	0.0352	0.8307	1.6541	2.2919	0.1714	1.5829	1.7543	0.0000	3,275.8326	3,275.8326	0.6135	0.0000	3,288.7157
2017	51.8046	24.4663	20.3335	0.0352	0.6379	1.4877	2.1256	0.1714	1.4234	1.5948	0.0000	3,231.4856	3,231.4856	0.5449	0.0000	3,242.9282
Total	**55.8235**	**50.8661**	**41.4701**	**0.0703**	**1.4685**	**3.1418**	**4.4175**	**0.3427**	**3.0063**	**3.3490**	**0.0000**	**6,507.3181**	**6,507.3181**	**1.1584**	**0.0000**	**6,531.6439**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**33.67**	**0.00**	**10.66**	**21.40**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/29/2015	1/29/2015	5	1	

2	Demolition	Demolition	6/1/2016	6/28/2016	5	20
3	Grading	Grading	6/29/2016	7/6/2016	5	6
4	Trenching	Trenching	7/7/2016	7/20/2016	5	10
5	Building Construction	Building Construction	7/21/2016	5/24/2017	5	220
6	Paving	Paving	5/25/2017	6/7/2017	5	10
7	Architectural Coating	Architectural Coating	6/8/2017	7/5/2017	5	20

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 3

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 166,485; Non-Residential Outdoor: 55,495 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	0	8.00	174	0.41
Site Preparation	Scrapers	0	8.00	361	0.48
Site Preparation	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Crawler Tractors	1	8.00	208	0.43
Demolition	Rubber Tired Dozers	0	8.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Crawler Tractors	1	8.00	208	0.43
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	0	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Trenching	Plate Compactors	1	8.00	8	0.43
Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Trenchers	1	8.00	80	0.50
Building Construction	Cranes	1	8.00	226	0.29
Building Construction	Forklifts	2	7.00	89	0.20

Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	0	8.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	0	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	10.00	0.00	125.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	47.00	18.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	9.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Clean Paved Roads

3.2 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Demolition - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.3556	0.0000	1.3556	0.2052	0.0000	0.2052			0.0000			0.0000
Off-Road	2.0356	20.6717	11.4445	0.0202		1.2164	1.2164		1.1468	1.1468		2,040.3482	2,040.3482	0.4940		2,050.7229
Total	**2.0356**	**20.6717**	**11.4445**	**0.0202**	**1.3556**	**1.2164**	**2.5719**	**0.2052**	**1.1468**	**1.3521**		**2,040.3482**	**2,040.3482**	**0.4940**		**2,050.7229**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1142	1.7222	1.2499	4.6000e-003	0.1089	0.0259	0.1348	0.0298	0.0238	0.0536		463.3372	463.3372	3.2900e-003		463.4064
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0347	0.0448	0.5490	1.3600e-003	0.1118	7.8000e-004	0.1126	0.0296	7.2000e-004	0.0304		113.4602	113.4602	5.3400e-003		113.5722
Total	**0.1489**	**1.7670**	**1.7989**	**5.9600e-003**	**0.2207**	**0.0267**	**0.2473**	**0.0595**	**0.0245**	**0.0840**		**576.7974**	**576.7974**	**8.6300e-003**		**576.9786**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6100	0.0000	0.6100	0.0924	0.0000	0.0924			0.0000			0.0000
Off-Road	2.0356	20.6717	11.4445	0.0202		1.2164	1.2164		1.1468	1.1468	0.0000	2,040.3482	2,040.3482	0.4940		2,050.7229
Total	**2.0356**	**20.6717**	**11.4445**	**0.0202**	**0.6100**	**1.2164**	**1.8264**	**0.0924**	**1.1468**	**1.2392**	**0.0000**	**2,040.3482**	**2,040.3482**	**0.4940**		**2,050.7229**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.1142	1.7222	1.2499	4.6000e-003	0.1089	0.0259	0.1348	0.0298	0.0238	0.0536		463.3372	463.3372	3.2900e-003		463.4064
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0347	0.0448	0.5490	1.3600e-003	0.1118	7.8000e-004	0.1126	0.0296	7.2000e-004	0.0304		113.4602	113.4602	5.3400e-003		113.5722
Total	**0.1489**	**1.7670**	**1.7989**	**5.9600e-003**	**0.2207**	**0.0267**	**0.2473**	**0.0595**	**0.0245**	**0.0840**		**576.7974**	**576.7974**	**8.6300e-003**		**576.9786**

3.4 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	2.3226	25.6158	11.9937	0.0194		1.3896	1.3896		1.2784	1.2784		2,016.1702	2,016.1702	0.6082		2,028.9413
Total	**2.3226**	**25.6158**	**11.9937**	**0.0194**	**0.5303**	**1.3896**	**1.9198**	**0.0573**	**1.2784**	**1.3356**		**2,016.1702**	**2,016.1702**	**0.6082**		**2,028.9413**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0347	0.0448	0.5490	1.3600e-003	0.1118	7.8000e-004	0.1126	0.0296	7.2000e-004	0.0304		113.4602	113.4602	5.3400e-003		113.5722
Total	**0.0347**	**0.0448**	**0.5490**	**1.3600e-003**	**0.1118**	**7.8000e-004**	**0.1126**	**0.0296**	**7.2000e-004**	**0.0304**		**113.4602**	**113.4602**	**5.3400e-003**		**113.5722**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2386	0.0000	0.2386	0.0258	0.0000	0.0258			0.0000			0.0000
Off-Road	2.3226	25.6158	11.9937	0.0194		1.3896	1.3896		1.2784	1.2784	0.0000	2,016.1702	2,016.1702	0.6082		2,028.9413
Total	**2.3226**	**25.6158**	**11.9937**	**0.0194**	**0.2386**	**1.3896**	**1.6282**	**0.0258**	**1.2784**	**1.3041**	**0.0000**	**2,016.1702**	**2,016.1702**	**0.6082**		**2,028.9413**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0347	0.0448	0.5490	1.3600e-003	0.1118	7.8000e-004	0.1126	0.0296	7.2000e-004	0.0304		113.4602	113.4602	5.3400e-003		113.5722
Total	**0.0347**	**0.0448**	**0.5490**	**1.3600e-003**	**0.1118**	**7.8000e-004**	**0.1126**	**0.0296**	**7.2000e-004**	**0.0304**		**113.4602**	**113.4602**	**5.3400e-003**		**113.5722**

3.5 Trenching - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2772	11.6308	7.8493	0.0102		0.8929	0.8929		0.8223	0.8223		1,041.5597	1,041.5597	0.3074		1,048.0141
Total	**1.2772**	**11.6308**	**7.8493**	**0.0102**		**0.8929**	**0.8929**		**0.8223**	**0.8223**		**1,041.5597**	**1,041.5597**	**0.3074**		**1,048.0141**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0347	0.0448	0.5490	1.3600e-003	0.1118	7.8000e-004	0.1126	0.0296	7.2000e-004	0.0304		113.4602	113.4602	5.3400e-003		113.5722
Total	**0.0347**	**0.0448**	**0.5490**	**1.3600e-003**	**0.1118**	**7.8000e-004**	**0.1126**	**0.0296**	**7.2000e-004**	**0.0304**		**113.4602**	**113.4602**	**5.3400e-003**		**113.5722**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2772	11.6308	7.8493	0.0102		0.8929	0.8929		0.8223	0.8223	0.0000	1,041.5597	1,041.5597	0.3074		1,048.0141

Total	**1.2772**	**11.6308**	**7.8493**	**0.0102**		**0.8929**	**0.8929**		**0.8223**	**0.8223**	**0.0000**	**1,041.5597**	**1,041.5597**	**0.3074**		**1,048.0141**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0347	0.0448	0.5490	1.3600e-003	0.1118	7.8000e-004	0.1126	0.0296	7.2000e-004	0.0304		113.4602	113.4602	5.3400e-003		113.5722
Total	**0.0347**	**0.0448**	**0.5490**	**1.3600e-003**	**0.1118**	**7.8000e-004**	**0.1126**	**0.0296**	**7.2000e-004**	**0.0304**		**113.4602**	**113.4602**	**5.3400e-003**		**113.5722**

3.6 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.6984	24.6320	16.7166	0.0249		1.6257	1.6257		1.5569	1.5569		2,352.2239	2,352.2239	0.5420		2,363.6057
Total	**3.6984**	**24.6320**	**16.7166**	**0.0249**		**1.6257**	**1.6257**		**1.5569**	**1.5569**		**2,352.2239**	**2,352.2239**	**0.5420**		**2,363.6057**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1574	1.5570	1.8398	3.8900e-003	0.1125	0.0247	0.1372	0.0320	0.0227	0.0547		390.3460	390.3460	2.7700e-003		390.4042
Worker	0.1631	0.2107	2.5802	6.3800e-003	0.5254	3.6700e-003	0.5290	0.1393	3.3800e-003	0.1427		533.2627	533.2627	0.0251		533.7894
Total	**0.3204**	**1.7677**	**4.4200**	**0.0103**	**0.6378**	**0.0283**	**0.6662**	**0.1714**	**0.0261**	**0.1974**		**923.6087**	**923.6087**	**0.0279**		**924.1935**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.6984	24.6320	16.7166	0.0249		1.6257	1.6257		1.5569	1.5569	0.0000	2,352.2239	2,352.2239	0.5420		2,363.6057
Total	**3.6984**	**24.6320**	**16.7166**	**0.0249**		**1.6257**	**1.6257**		**1.5569**	**1.5569**	**0.0000**	**2,352.2239**	**2,352.2239**	**0.5420**		**2,363.6057**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1574	1.5570	1.8398	3.8900e-003	0.1125	0.0247	0.1372	0.0320	0.0227	0.0547		390.3460	390.3460	2.7700e-003		390.4042
Worker	0.1631	0.2107	2.5802	6.3800e-003	0.5254	3.6700e-003	0.5290	0.1393	3.3800e-003	0.1427		533.2627	533.2627	0.0251		533.7894
Total	**0.3204**	**1.7677**	**4.4200**	**0.0103**	**0.6378**	**0.0283**	**0.6662**	**0.1714**	**0.0261**	**0.1974**		**923.6087**	**923.6087**	**0.0279**		**924.1935**

3.6 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.3275	22.8585	16.2492	0.0249		1.4621	1.4621		1.3998	1.3998		2,334.8503	2,334.8503	0.5189		2,345.7479
Total	**3.3275**	**22.8585**	**16.2492**	**0.0249**		**1.4621**	**1.4621**		**1.3998**	**1.3998**		**2,334.8503**	**2,334.8503**	**0.5189**		**2,345.7479**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1452	1.4166	1.7308	3.8900e-003	0.1125	0.0220	0.1345	0.0321	0.0203	0.0523		383.9926	383.9926	2.6800e-003		384.0489
Worker	0.1485	0.1913	2.3535	6.3800e-003	0.5254	3.5900e-003	0.5289	0.1393	3.3100e-003	0.1426		512.6427	512.6427	0.0233		513.1314
Total	**0.2937**	**1.6079**	**4.0843**	**0.0103**	**0.6379**	**0.0256**	**0.6635**	**0.1714**	**0.0236**	**0.1949**		**896.6353**	**896.6353**	**0.0260**		**897.1803**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.3275	22.8585	16.2492	0.0249		1.4621	1.4621		1.3998	1.3998	0.0000	2,334.8503	2,334.8503	0.5189		2,345.7479
Total	**3.3275**	**22.8585**	**16.2492**	**0.0249**		**1.4621**	**1.4621**		**1.3998**	**1.3998**	**0.0000**	**2,334.8503**	**2,334.8503**	**0.5189**		**2,345.7479**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1452	1.4166	1.7308	3.8900e-003	0.1125	0.0220	0.1345	0.0321	0.0203	0.0523		383.9926	383.9926	2.6800e-003		384.0489
Worker	0.1485	0.1913	2.3535	6.3800e-003	0.5254	3.5900e-003	0.5289	0.1393	3.3100e-003	0.1426		512.6427	512.6427	0.0233		513.1314
Total	**0.2937**	**1.6079**	**4.0843**	**0.0103**	**0.6379**	**0.0256**	**0.6635**	**0.1714**	**0.0236**	**0.1949**		**896.6353**	**896.6353**	**0.0260**		**897.1803**

3.7 Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3414	3.5845	2.8450	4.7200e-003		0.1753	0.1753		0.1625	0.1625		460.8676	460.8676	0.1310		463.6181
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.3414**	**3.5845**	**2.8450**	**4.7200e-003**		**0.1753**	**0.1753**		**0.1625**	**0.1625**		**460.8676**	**460.8676**	**0.1310**		**463.6181**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0158	0.0204	0.2504	6.8000e-004	0.0559	3.8000e-004	0.0563	0.0148	3.5000e-004	0.0152		54.5365	54.5365	2.4800e-003		54.5884
Total	**0.0158**	**0.0204**	**0.2504**	**6.8000e-004**	**0.0559**	**3.8000e-004**	**0.0563**	**0.0148**	**3.5000e-004**	**0.0152**		**54.5365**	**54.5365**	**2.4800e-003**		**54.5884**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3414	3.5845	2.8450	4.7200e-003		0.1753	0.1753		0.1625	0.1625	0.0000	460.8676	460.8676	0.1310		463.6181

Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.3414**	**3.5845**	**2.8450**	**4.7200e-003**		**0.1753**	**0.1753**		**0.1625**	**0.1625**	**0.0000**	**460.8676**	**460.8676**	**0.1310**		**463.6181**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0158	0.0204	0.2504	6.8000e-004	0.0559	3.8000e-004	0.0563	0.0148	3.5000e-004	0.0152		54.5365	54.5365	2.4800e-003		54.5884
Total	**0.0158**	**0.0204**	**0.2504**	**6.8000e-004**	**0.0559**	**3.8000e-004**	**0.0563**	**0.0148**	**3.5000e-004**	**0.0152**		**54.5365**	**54.5365**	**2.4800e-003**		**54.5884**

3.8 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	51.4439					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	**51.7762**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.0721**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0284	0.0366	0.4507	1.2200e-003	0.1006	6.9000e-004	0.1013	0.0267	6.3000e-004	0.0273		98.1656	98.1656	4.4600e-003		98.2592
Total	**0.0284**	**0.0366**	**0.4507**	**1.2200e-003**	**0.1006**	**6.9000e-004**	**0.1013**	**0.0267**	**6.3000e-004**	**0.0273**		**98.1656**	**98.1656**	**4.4600e-003**		**98.2592**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	51.4439					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721
Total	**51.7762**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.0721**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0284	0.0366	0.4507	1.2200e-003	0.1006	6.9000e-004	0.1013	0.0267	6.3000e-004	0.0273		98.1656	98.1656	4.4600e-003		98.2592
Total	**0.0284**	**0.0366**	**0.4507**	**1.2200e-003**	**0.1006**	**6.9000e-004**	**0.1013**	**0.0267**	**6.3000e-004**	**0.0273**		**98.1656**	**98.1656**	**4.4600e-003**		**98.2592**

Math/Science Building

Orange County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	110.99	1000sqft	2.55	110,990.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - modified

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Demolition -

Grading - modified

Architectural Coating - modified

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	3.00	1.00
tblConstructionPhase	PhaseEndDate	2/26/2015	6/28/2016
tblConstructionPhase	PhaseStartDate	1/30/2015	6/1/2016
tblGrading	AcresOfGrading	6.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2017

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					

2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2016	4.0446	26.4574	21.3581	0.0348	1.5762	1.6544	2.8193	0.2647	1.5832	1.7545	0.0000	3,244.3254	3,244.3254	0.6135	0.0000	3,257.2086
2017	51.8061	24.5180	20.5573	0.0348	0.6379	1.4879	2.1258	0.1714	1.4236	1.5950	0.0000	3,201.0930	3,201.0930	0.5450	0.0000	3,212.5374
Total	**55.8506**	**50.9754**	**41.9154**	**0.0696**	**2.2141**	**3.1423**	**4.9451**	**0.4361**	**3.0068**	**3.3495**	**0.0000**	**6,445.4184**	**6,445.4184**	**1.1585**	**0.0000**	**6,469.7460**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2016	4.0446	26.4574	21.3581	0.0348	0.8307	1.6544	2.2922	0.1714	1.5832	1.7545	0.0000	3,244.3254	3,244.3254	0.6135	0.0000	3,257.2085
2017	51.8061	24.5180	20.5573	0.0348	0.6379	1.4879	2.1258	0.1714	1.4236	1.5950	0.0000	3,201.0930	3,201.0930	0.5450	0.0000	3,212.5374
Total	**55.8506**	**50.9754**	**41.9154**	**0.0696**	**1.4685**	**3.1423**	**4.4180**	**0.3427**	**3.0068**	**3.3495**	**0.0000**	**6,445.4184**	**6,445.4184**	**1.1585**	**0.0000**	**6,469.7460**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**33.67**	**0.00**	**10.66**	**21.40**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/29/2015	1/29/2015	5	1	

2	Demolition	Demolition	6/1/2016	6/28/2016	5	20
3	Grading	Grading	6/29/2016	7/6/2016	5	6
4	Trenching	Trenching	7/7/2016	7/20/2016	5	10
5	Building Construction	Building Construction	7/21/2016	5/24/2017	5	220
6	Paving	Paving	5/25/2017	6/7/2017	5	10
7	Architectural Coating	Architectural Coating	6/8/2017	7/5/2017	5	20

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 3

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 166,485; Non-Residential Outdoor: 55,495 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	0	8.00	174	0.41
Site Preparation	Scrapers	0	8.00	361	0.48
Site Preparation	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Crawler Tractors	1	8.00	208	0.43
Demolition	Rubber Tired Dozers	0	8.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Crawler Tractors	1	8.00	208	0.43
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	0	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Trenching	Plate Compactors	1	8.00	8	0.43
Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Trenchers	1	8.00	80	0.50
Building Construction	Cranes	1	8.00	226	0.29
Building Construction	Forklifts	2	7.00	89	0.20

Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	0	8.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	0	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	10.00	0.00	125.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	47.00	18.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	9.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Clean Paved Roads

3.2 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Demolition - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.3556	0.0000	1.3556	0.2052	0.0000	0.2052			0.0000			0.0000
Off-Road	2.0356	20.6717	11.4445	0.0202		1.2164	1.2164		1.1468	1.1468		2,040.3482	2,040.3482	0.4940		2,050.7229
Total	**2.0356**	**20.6717**	**11.4445**	**0.0202**	**1.3556**	**1.2164**	**2.5719**	**0.2052**	**1.1468**	**1.3521**		**2,040.3482**	**2,040.3482**	**0.4940**		**2,050.7229**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1221	1.7812	1.4345	4.5900e-003	0.1089	0.0260	0.1348	0.0298	0.0239	0.0537		462.2328	462.2328	3.3400e-003		462.3029
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0365	0.0493	0.5171	1.2800e-003	0.1118	7.8000e-004	0.1126	0.0296	7.2000e-004	0.0304		107.4568	107.4568	5.3400e-003		107.5688
Total	**0.1587**	**1.8305**	**1.9516**	**5.8700e-003**	**0.2207**	**0.0267**	**0.2474**	**0.0595**	**0.0246**	**0.0841**		**569.6896**	**569.6896**	**8.6800e-003**		**569.8717**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6100	0.0000	0.6100	0.0924	0.0000	0.0924			0.0000			0.0000
Off-Road	2.0356	20.6717	11.4445	0.0202		1.2164	1.2164		1.1468	1.1468	0.0000	2,040.3482	2,040.3482	0.4940		2,050.7229
Total	**2.0356**	**20.6717**	**11.4445**	**0.0202**	**0.6100**	**1.2164**	**1.8264**	**0.0924**	**1.1468**	**1.2392**	**0.0000**	**2,040.3482**	**2,040.3482**	**0.4940**		**2,050.7229**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.1221	1.7812	1.4345	4.5900e-003	0.1089	0.0260	0.1348	0.0298	0.0239	0.0537		462.2328	462.2328	3.3400e-003		462.3029
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0365	0.0493	0.5171	1.2800e-003	0.1118	7.8000e-004	0.1126	0.0296	7.2000e-004	0.0304		107.4568	107.4568	5.3400e-003		107.5688
Total	**0.1587**	**1.8305**	**1.9516**	**5.8700e-003**	**0.2207**	**0.0267**	**0.2474**	**0.0595**	**0.0246**	**0.0841**		**569.6896**	**569.6896**	**8.6800e-003**		**569.8717**

3.4 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	2.3226	25.6158	11.9937	0.0194		1.3896	1.3896		1.2784	1.2784		2,016.1702	2,016.1702	0.6082		2,028.9413
Total	**2.3226**	**25.6158**	**11.9937**	**0.0194**	**0.5303**	**1.3896**	**1.9198**	**0.0573**	**1.2784**	**1.3356**		**2,016.1702**	**2,016.1702**	**0.6082**		**2,028.9413**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0365	0.0493	0.5171	1.2800e-003	0.1118	7.8000e-004	0.1126	0.0296	7.2000e-004	0.0304		107.4568	107.4568	5.3400e-003		107.5688
Total	**0.0365**	**0.0493**	**0.5171**	**1.2800e-003**	**0.1118**	**7.8000e-004**	**0.1126**	**0.0296**	**7.2000e-004**	**0.0304**		**107.4568**	**107.4568**	**5.3400e-003**		**107.5688**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2386	0.0000	0.2386	0.0258	0.0000	0.0258			0.0000			0.0000
Off-Road	2.3226	25.6158	11.9937	0.0194		1.3896	1.3896		1.2784	1.2784	0.0000	2,016.1702	2,016.1702	0.6082		2,028.9413
Total	**2.3226**	**25.6158**	**11.9937**	**0.0194**	**0.2386**	**1.3896**	**1.6282**	**0.0258**	**1.2784**	**1.3041**	**0.0000**	**2,016.1702**	**2,016.1702**	**0.6082**		**2,028.9413**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0365	0.0493	0.5171	1.2800e-003	0.1118	7.8000e-004	0.1126	0.0296	7.2000e-004	0.0304		107.4568	107.4568	5.3400e-003		107.5688
Total	**0.0365**	**0.0493**	**0.5171**	**1.2800e-003**	**0.1118**	**7.8000e-004**	**0.1126**	**0.0296**	**7.2000e-004**	**0.0304**		**107.4568**	**107.4568**	**5.3400e-003**		**107.5688**

3.5 Trenching - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2772	11.6308	7.8493	0.0102		0.8929	0.8929		0.8223	0.8223		1,041.5597	1,041.5597	0.3074		1,048.0141
Total	**1.2772**	**11.6308**	**7.8493**	**0.0102**		**0.8929**	**0.8929**		**0.8223**	**0.8223**		**1,041.5597**	**1,041.5597**	**0.3074**		**1,048.0141**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0365	0.0493	0.5171	1.2800e-003	0.1118	7.8000e-004	0.1126	0.0296	7.2000e-004	0.0304		107.4568	107.4568	5.3400e-003		107.5688
Total	**0.0365**	**0.0493**	**0.5171**	**1.2800e-003**	**0.1118**	**7.8000e-004**	**0.1126**	**0.0296**	**7.2000e-004**	**0.0304**		**107.4568**	**107.4568**	**5.3400e-003**		**107.5688**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2772	11.6308	7.8493	0.0102		0.8929	0.8929		0.8223	0.8223	0.0000	1,041.5597	1,041.5597	0.3074		1,048.0141

Total	**1.2772**	**11.6308**	**7.8493**	**0.0102**		**0.8929**	**0.8929**		**0.8223**	**0.8223**	**0.0000**	**1,041.5597**	**1,041.5597**	**0.3074**		**1,048.0141**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0365	0.0493	0.5171	1.2800e-003	0.1118	7.8000e-004	0.1126	0.0296	7.2000e-004	0.0304		107.4568	107.4568	5.3400e-003		107.5688
Total	**0.0365**	**0.0493**	**0.5171**	**1.2800e-003**	**0.1118**	**7.8000e-004**	**0.1126**	**0.0296**	**7.2000e-004**	**0.0304**		**107.4568**	**107.4568**	**5.3400e-003**		**107.5688**

3.6 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.6984	24.6320	16.7166	0.0249		1.6257	1.6257		1.5569	1.5569		2,352.2239	2,352.2239	0.5420		2,363.6057
Total	**3.6984**	**24.6320**	**16.7166**	**0.0249**		**1.6257**	**1.6257**		**1.5569**	**1.5569**		**2,352.2239**	**2,352.2239**	**0.5420**		**2,363.6057**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1745	1.5937	2.2111	3.8700e-003	0.1125	0.0249	0.1374	0.0320	0.0229	0.0550		387.0547	387.0547	2.8600e-003		387.1146
Worker	0.1717	0.2317	2.4304	6.0400e-003	0.5254	3.6700e-003	0.5290	0.1393	3.3800e-003	0.1427		505.0469	505.0469	0.0251		505.5735
Total	**0.3461**	**1.8254**	**4.6415**	**9.9100e-003**	**0.6378**	**0.0286**	**0.6664**	**0.1714**	**0.0263**	**0.1977**		**892.1015**	**892.1015**	**0.0279**		**892.6881**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.6984	24.6320	16.7166	0.0249		1.6257	1.6257		1.5569	1.5569	0.0000	2,352.2239	2,352.2239	0.5420		2,363.6057
Total	**3.6984**	**24.6320**	**16.7166**	**0.0249**		**1.6257**	**1.6257**		**1.5569**	**1.5569**	**0.0000**	**2,352.2239**	**2,352.2239**	**0.5420**		**2,363.6057**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1745	1.5937	2.2111	3.8700e-003	0.1125	0.0249	0.1374	0.0320	0.0229	0.0550		387.0547	387.0547	2.8600e-003		387.1146
Worker	0.1717	0.2317	2.4304	6.0400e-003	0.5254	3.6700e-003	0.5290	0.1393	3.3800e-003	0.1427		505.0469	505.0469	0.0251		505.5735
Total	**0.3461**	**1.8254**	**4.6415**	**9.9100e-003**	**0.6378**	**0.0286**	**0.6664**	**0.1714**	**0.0263**	**0.1977**		**892.1015**	**892.1015**	**0.0279**		**892.6881**

3.6 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.3275	22.8585	16.2492	0.0249		1.4621	1.4621		1.3998	1.3998		2,334.8503	2,334.8503	0.5189		2,345.7479
Total	**3.3275**	**22.8585**	**16.2492**	**0.0249**		**1.4621**	**1.4621**		**1.3998**	**1.3998**		**2,334.8503**	**2,334.8503**	**0.5189**		**2,345.7479**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1605	1.4491	2.0978	3.8600e-003	0.1125	0.0223	0.1348	0.0321	0.0205	0.0525		380.7467	380.7467	2.7700e-003		380.8048
Worker	0.1561	0.2104	2.2104	6.0400e-003	0.5254	3.5900e-003	0.5289	0.1393	3.3100e-003	0.1426		485.4961	485.4961	0.0233		485.9848
Total	**0.3165**	**1.6595**	**4.3081**	**9.9000e-003**	**0.6379**	**0.0258**	**0.6637**	**0.1714**	**0.0238**	**0.1952**		**866.2427**	**866.2427**	**0.0260**		**866.7896**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.3275	22.8585	16.2492	0.0249		1.4621	1.4621		1.3998	1.3998	0.0000	2,334.8503	2,334.8503	0.5189		2,345.7479
Total	**3.3275**	**22.8585**	**16.2492**	**0.0249**		**1.4621**	**1.4621**		**1.3998**	**1.3998**	**0.0000**	**2,334.8503**	**2,334.8503**	**0.5189**		**2,345.7479**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1605	1.4491	2.0978	3.8600e-003	0.1125	0.0223	0.1348	0.0321	0.0205	0.0525		380.7467	380.7467	2.7700e-003		380.8048
Worker	0.1561	0.2104	2.2104	6.0400e-003	0.5254	3.5900e-003	0.5289	0.1393	3.3100e-003	0.1426		485.4961	485.4961	0.0233		485.9848
Total	**0.3165**	**1.6595**	**4.3081**	**9.9000e-003**	**0.6379**	**0.0258**	**0.6637**	**0.1714**	**0.0238**	**0.1952**		**866.2427**	**866.2427**	**0.0260**		**866.7896**

3.7 Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3414	3.5845	2.8450	4.7200e-003		0.1753	0.1753		0.1625	0.1625		460.8676	460.8676	0.1310		463.6181
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.3414**	**3.5845**	**2.8450**	**4.7200e-003**		**0.1753**	**0.1753**		**0.1625**	**0.1625**		**460.8676**	**460.8676**	**0.1310**		**463.6181**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0166	0.0224	0.2351	6.4000e-004	0.0559	3.8000e-004	0.0563	0.0148	3.5000e-004	0.0152		51.6485	51.6485	2.4800e-003		51.7005
Total	**0.0166**	**0.0224**	**0.2351**	**6.4000e-004**	**0.0559**	**3.8000e-004**	**0.0563**	**0.0148**	**3.5000e-004**	**0.0152**		**51.6485**	**51.6485**	**2.4800e-003**		**51.7005**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3414	3.5845	2.8450	4.7200e-003		0.1753	0.1753		0.1625	0.1625	0.0000	460.8676	460.8676	0.1310		463.6181

Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.3414**	**3.5845**	**2.8450**	**4.7200e-003**		**0.1753**	**0.1753**		**0.1625**	**0.1625**	**0.0000**	**460.8676**	**460.8676**	**0.1310**		**463.6181**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0166	0.0224	0.2351	6.4000e-004	0.0559	3.8000e-004	0.0563	0.0148	3.5000e-004	0.0152		51.6485	51.6485	2.4800e-003		51.7005
Total	**0.0166**	**0.0224**	**0.2351**	**6.4000e-004**	**0.0559**	**3.8000e-004**	**0.0563**	**0.0148**	**3.5000e-004**	**0.0152**		**51.6485**	**51.6485**	**2.4800e-003**		**51.7005**

3.8 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	51.4439					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	**51.7762**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.0721**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0299	0.0403	0.4233	1.1600e-003	0.1006	6.9000e-004	0.1013	0.0267	6.3000e-004	0.0273		92.9673	92.9673	4.4600e-003		93.0609
Total	**0.0299**	**0.0403**	**0.4233**	**1.1600e-003**	**0.1006**	**6.9000e-004**	**0.1013**	**0.0267**	**6.3000e-004**	**0.0273**		**92.9673**	**92.9673**	**4.4600e-003**		**93.0609**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	51.4439					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721
Total	**51.7762**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.0721**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0299	0.0403	0.4233	1.1600e-003	0.1006	6.9000e-004	0.1013	0.0267	6.3000e-004	0.0273		92.9673	92.9673	4.4600e-003		93.0609
Total	**0.0299**	**0.0403**	**0.4233**	**1.1600e-003**	**0.1006**	**6.9000e-004**	**0.1013**	**0.0267**	**6.3000e-004**	**0.0273**		**92.9673**	**92.9673**	**4.4600e-003**		**93.0609**

One Stop Student Center

Orange County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	58.99	1000sqft	1.35	58,991.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2016
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - modified

Construction Phase - modified

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Demolition -

Grading - modified

Architectural Coating - modified

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	2.00	1.00
tblConstructionPhase	PhaseEndDate	8/24/2015	8/21/2015
tblConstructionPhase	PhaseStartDate	8/22/2015	8/21/2015
tblGrading	AcresOfGrading	3.00	1.50
tblLandUse	LandUseSquareFeet	58,990.00	58,991.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2016

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					

2015	0.1859	1.2596	0.9153	1.4900e-003	0.0474	0.0799	0.1273	9.2100e-003	0.0766	0.0858	0.0000	128.9343	128.9343	0.0245	0.0000	129.4480
2016	0.4873	1.3378	1.0690	1.7000e-003	0.0210	0.0858	0.1068	5.6500e-003	0.0828	0.0884	0.0000	143.3794	143.3794	0.0262	0.0000	143.9301
Total	**0.6733**	**2.5975**	**1.9843**	**3.1900e-003**	**0.0684**	**0.1657**	**0.2341**	**0.0149**	**0.1593**	**0.1742**	**0.0000**	**272.3137**	**272.3137**	**0.0507**	**0.0000**	**273.3781**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2015	0.1859	1.2596	0.9153	1.4900e-003	0.0474	0.0799	0.1273	9.2100e-003	0.0766	0.0858	0.0000	128.9342	128.9342	0.0245	0.0000	129.4479
2016	0.4873	1.3378	1.0690	1.7000e-003	0.0210	0.0858	0.1068	5.6500e-003	0.0828	0.0884	0.0000	143.3793	143.3793	0.0262	0.0000	143.9300
Total	**0.6733**	**2.5975**	**1.9843**	**3.1900e-003**	**0.0684**	**0.1657**	**0.2341**	**0.0149**	**0.1593**	**0.1742**	**0.0000**	**272.3134**	**272.3134**	**0.0507**	**0.0000**	**273.3779**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/25/2015	8/21/2015	5	20	
2	Site Preparation	Site Preparation	8/21/2015	8/21/2015	5	1	
3	Grading	Grading	8/22/2015	8/27/2015	5	4	
4	Trenching	Trenching	8/28/2015	9/10/2015	5	10	

5	Building Construction	Building Construction	9/11/2015	6/16/2016	5	200	
6	Paving	Paving	6/17/2016	6/30/2016	5	10	
7	Architectural Coating	Architectural Coating	7/1/2016	7/28/2016	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 88,487; Non-Residential Outdoor: 29,496 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Crawler Tractors	1	8.00	208	0.43
Demolition	Rubber Tired Dozers	0	8.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Graders	0	8.00	174	0.41
Site Preparation	Rubber Tired Dozers	0	7.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Crawler Tractors	1	6.00	208	0.43
Grading	Graders	1	6.00	174	0.41
Grading	Rubber Tired Dozers	0	6.00	255	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Trenching	Plate Compactors	1	7.00	8	0.43
Trenching	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Trenching	Trenchers	1	7.00	80	0.50
Building Construction	Cranes	1	6.00	226	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45

Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	0	6.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	0	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	268.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	25.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0290	0.0000	0.0290	4.4000e-003	0.0000	4.4000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0215	0.2155	0.1152	2.0000e-004		0.0130	0.0130		0.0123	0.0123	0.0000	18.6582	18.6582	4.5400e-003	0.0000	18.7536

Total	**0.0215**	**0.2155**	**0.1152**	**2.0000e-004**	**0.0290**	**0.0130**	**0.0420**	**4.4000e-003**	**0.0123**	**0.0167**	**0.0000**	**18.6582**	**18.6582**	**4.5400e-003**	**0.0000**	**18.7536**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.8300e-003	0.0440	0.0316	1.0000e-004	2.3000e-003	6.9000e-004	2.9900e-003	6.3000e-004	6.4000e-004	1.2700e-003	0.0000	9.1030	9.1030	7.0000e-005	0.0000	9.1045
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8000e-004	5.6000e-004	5.8200e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	1.0255	1.0255	5.0000e-005	0.0000	1.0266
Total	**3.2100e-003**	**0.0446**	**0.0374**	**1.1000e-004**	**3.4000e-003**	**7.0000e-004**	**4.1000e-003**	**9.2000e-004**	**6.5000e-004**	**1.5700e-003**	**0.0000**	**10.1285**	**10.1285**	**1.2000e-004**	**0.0000**	**10.1311**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0290	0.0000	0.0290	4.4000e-003	0.0000	4.4000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0215	0.2155	0.1152	2.0000e-004		0.0130	0.0130		0.0123	0.0123	0.0000	18.6582	18.6582	4.5400e-003	0.0000	18.7535
Total	**0.0215**	**0.2155**	**0.1152**	**2.0000e-004**	**0.0290**	**0.0130**	**0.0420**	**4.4000e-003**	**0.0123**	**0.0167**	**0.0000**	**18.6582**	**18.6582**	**4.5400e-003**	**0.0000**	**18.7535**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.8300e-003	0.0440	0.0316	1.0000e-004	2.3000e-003	6.9000e-004	2.9900e-003	6.3000e-004	6.4000e-004	1.2700e-003	0.0000	9.1030	9.1030	7.0000e-005	0.0000	9.1045
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8000e-004	5.6000e-004	5.8200e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	1.0255	1.0255	5.0000e-005	0.0000	1.0266
Total	**3.2100e-003**	**0.0446**	**0.0374**	**1.1000e-004**	**3.4000e-003**	**7.0000e-004**	**4.1000e-003**	**9.2000e-004**	**6.5000e-004**	**1.5700e-003**	**0.0000**	**10.1285**	**10.1285**	**1.2000e-004**	**0.0000**	**10.1311**

3.3 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Grading - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.0000e-004	0.0000	8.0000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.2900e-003	0.0368	0.0160	3.0000e-005		1.9500e-003	1.9500e-003		1.7900e-003	1.7900e-003	0.0000	2.5150	2.5150	7.5000e-004	0.0000	2.5308
Total	**3.2900e-003**	**0.0368**	**0.0160**	**3.0000e-005**	**8.0000e-004**	**1.9500e-003**	**2.7500e-003**	**9.0000e-005**	**1.7900e-003**	**1.8800e-003**	**0.0000**	**2.5150**	**2.5150**	**7.5000e-004**	**0.0000**	**2.5308**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	9.0000e-005	9.3000e-004	0.0000	1.8000e-004	0.0000	1.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1641	0.1641	1.0000e-005	0.0000	0.1643
Total	**6.0000e-005**	**9.0000e-005**	**9.3000e-004**	**0.0000**	**1.8000e-004**	**0.0000**	**1.8000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1641**	**0.1641**	**1.0000e-005**	**0.0000**	**0.1643**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.0000e-004	0.0000	8.0000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.2900e-003	0.0368	0.0160	3.0000e-005		1.9500e-003	1.9500e-003		1.7900e-003	1.7900e-003	0.0000	2.5150	2.5150	7.5000e-004	0.0000	2.5308
Total	**3.2900e-003**	**0.0368**	**0.0160**	**3.0000e-005**	**8.0000e-004**	**1.9500e-003**	**2.7500e-003**	**9.0000e-005**	**1.7900e-003**	**1.8800e-003**	**0.0000**	**2.5150**	**2.5150**	**7.5000e-004**	**0.0000**	**2.5308**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	9.0000e-005	9.3000e-004	0.0000	1.8000e-004	0.0000	1.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1641	0.1641	1.0000e-005	0.0000	0.1643
Total	**6.0000e-005**	**9.0000e-005**	**9.3000e-004**	**0.0000**	**1.8000e-004**	**0.0000**	**1.8000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1641**	**0.1641**	**1.0000e-005**	**0.0000**	**0.1643**

3.5 Trenching - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.8500e-003	0.0533	0.0345	4.0000e-005		4.1300e-003	4.1300e-003		3.8000e-003	3.8000e-003	0.0000	4.1795	4.1795	1.2200e-003	0.0000	4.2052

Total	**5.8500e-003**	**0.0533**	**0.0345**	**4.0000e-005**		**4.1300e-003**	**4.1300e-003**		**3.8000e-003**	**3.8000e-003**	**0.0000**	**4.1795**	**4.1795**	**1.2200e-003**	**0.0000**	**4.2052**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e-004	2.8000e-004	2.9100e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.5127	0.5127	3.0000e-005	0.0000	0.5133
Total	**1.9000e-004**	**2.8000e-004**	**2.9100e-003**	**1.0000e-005**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.5127**	**0.5127**	**3.0000e-005**	**0.0000**	**0.5133**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.8500e-003	0.0533	0.0345	4.0000e-005		4.1300e-003	4.1300e-003		3.8000e-003	3.8000e-003	0.0000	4.1795	4.1795	1.2200e-003	0.0000	4.2052
Total	**5.8500e-003**	**0.0533**	**0.0345**	**4.0000e-005**		**4.1300e-003**	**4.1300e-003**		**3.8000e-003**	**3.8000e-003**	**0.0000**	**4.1795**	**4.1795**	**1.2200e-003**	**0.0000**	**4.2052**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e-004	2.8000e-004	2.9100e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.5127	0.5127	3.0000e-005	0.0000	0.5133
Total	**1.9000e-004**	**2.8000e-004**	**2.9100e-003**	**1.0000e-005**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.5127**	**0.5127**	**3.0000e-005**	**0.0000**	**0.5133**

3.6 Building Construction - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1440	0.8626	0.6002	8.8000e-004		0.0594	0.0594		0.0574	0.0574	0.0000	74.5933	74.5933	0.0172	0.0000	74.9546
Total	**0.1440**	**0.8626**	**0.6002**	**8.8000e-004**		**0.0594**	**0.0594**		**0.0574**	**0.0574**	**0.0000**	**74.5933**	**74.5933**	**0.0172**	**0.0000**	**74.9546**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.1100e-003	0.0409	0.0500	9.0000e-005	2.4600e-003	6.6000e-004	3.1200e-003	7.0000e-004	6.1000e-004	1.3100e-003	0.0000	7.9282	7.9282	6.0000e-005	0.0000	7.9295
Worker	3.7600e-003	5.5900e-003	0.0582	1.3000e-004	0.0110	8.0000e-005	0.0111	2.9200e-003	7.0000e-005	2.9900e-003	0.0000	10.2548	10.2548	5.2000e-004	0.0000	10.2658
Total	**7.8700e-003**	**0.0465**	**0.1082**	**2.2000e-004**	**0.0134**	**7.4000e-004**	**0.0142**	**3.6200e-003**	**6.8000e-004**	**4.3000e-003**	**0.0000**	**18.1830**	**18.1830**	**5.8000e-004**	**0.0000**	**18.1954**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1440	0.8626	0.6002	8.8000e-004		0.0594	0.0594		0.0574	0.0574	0.0000	74.5932	74.5932	0.0172	0.0000	74.9545
Total	**0.1440**	**0.8626**	**0.6002**	**8.8000e-004**		**0.0594**	**0.0594**		**0.0574**	**0.0574**	**0.0000**	**74.5932**	**74.5932**	**0.0172**	**0.0000**	**74.9545**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.1100e-003	0.0409	0.0500	9.0000e-005	2.4600e-003	6.6000e-004	3.1200e-003	7.0000e-004	6.1000e-004	1.3100e-003	0.0000	7.9282	7.9282	6.0000e-005	0.0000	7.9295
Worker	3.7600e-003	5.5900e-003	0.0582	1.3000e-004	0.0110	8.0000e-005	0.0111	2.9200e-003	7.0000e-005	2.9900e-003	0.0000	10.2548	10.2548	5.2000e-004	0.0000	10.2658
Total	**7.8700e-003**	**0.0465**	**0.1082**	**2.2000e-004**	**0.0134**	**7.4000e-004**	**0.0142**	**3.6200e-003**	**6.8000e-004**	**4.3000e-003**	**0.0000**	**18.1830**	**18.1830**	**5.8000e-004**	**0.0000**	**18.1954**

3.6 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1975	1.2328	0.8824	1.3200e-003		0.0819	0.0819		0.0791	0.0791	0.0000	111.4173	111.4173	0.0245	0.0000	111.9316
Total	**0.1975**	**1.2328**	**0.8824**	**1.3200e-003**		**0.0819**	**0.0819**		**0.0791**	**0.0791**	**0.0000**	**111.4173**	**111.4173**	**0.0245**	**0.0000**	**111.9316**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.6000e-003	0.0542	0.0707	1.3000e-004	3.6900e-003	8.3000e-004	4.5200e-003	1.0500e-003	7.6000e-004	1.8100e-003	0.0000	11.7621	11.7621	8.0000e-005	0.0000	11.7638
Worker	5.1300e-003	7.5900e-003	0.0792	2.0000e-004	0.0165	1.2000e-004	0.0166	4.3700e-003	1.1000e-004	4.4800e-003	0.0000	14.8427	14.8427	7.3000e-004	0.0000	14.8580
Total	**0.0107**	**0.0618**	**0.1499**	**3.3000e-004**	**0.0202**	**9.5000e-004**	**0.0211**	**5.4200e-003**	**8.7000e-004**	**6.2900e-003**	**0.0000**	**26.6048**	**26.6048**	**8.1000e-004**	**0.0000**	**26.6218**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1975	1.2328	0.8824	1.3200e-003		0.0819	0.0819		0.0791	0.0791	0.0000	111.4172	111.4172	0.0245	0.0000	111.9315
Total	**0.1975**	**1.2328**	**0.8824**	**1.3200e-003**		**0.0819**	**0.0819**		**0.0791**	**0.0791**	**0.0000**	**111.4172**	**111.4172**	**0.0245**	**0.0000**	**111.9315**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.6000e-003	0.0542	0.0707	1.3000e-004	3.6900e-003	8.3000e-004	4.5200e-003	1.0500e-003	7.6000e-004	1.8100e-003	0.0000	11.7621	11.7621	8.0000e-005	0.0000	11.7638
Worker	5.1300e-003	7.5900e-003	0.0792	2.0000e-004	0.0165	1.2000e-004	0.0166	4.3700e-003	1.1000e-004	4.4800e-003	0.0000	14.8427	14.8427	7.3000e-004	0.0000	14.8580
Total	**0.0107**	**0.0618**	**0.1499**	**3.3000e-004**	**0.0202**	**9.5000e-004**	**0.0211**	**5.4200e-003**	**8.7000e-004**	**6.2900e-003**	**0.0000**	**26.6048**	**26.6048**	**8.1000e-004**	**0.0000**	**26.6218**

3.7 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.7600e-003	0.0192	0.0139	2.0000e-005		9.4000e-004	9.4000e-004		8.7000e-004	8.7000e-004	0.0000	2.0619	2.0619	5.9000e-004	0.0000	2.0743

Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.7600e-003**	**0.0192**	**0.0139**	**2.0000e-005**		**9.4000e-004**	**9.4000e-004**		**8.7000e-004**	**8.7000e-004**	**0.0000**	**2.0619**	**2.0619**	**5.9000e-004**	**0.0000**	**2.0743**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0000e-005	1.3000e-004	1.3200e-003	0.0000	2.7000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2474	0.2474	1.0000e-005	0.0000	0.2476
Total	**9.0000e-005**	**1.3000e-004**	**1.3200e-003**	**0.0000**	**2.7000e-004**	**0.0000**	**2.8000e-004**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**0.0000**	**0.2474**	**0.2474**	**1.0000e-005**	**0.0000**	**0.2476**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.7600e-003	0.0192	0.0139	2.0000e-005		9.4000e-004	9.4000e-004		8.7000e-004	8.7000e-004	0.0000	2.0619	2.0619	5.9000e-004	0.0000	2.0742
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.7600e-003**	**0.0192**	**0.0139**	**2.0000e-005**		**9.4000e-004**	**9.4000e-004**		**8.7000e-004**	**8.7000e-004**	**0.0000**	**2.0619**	**2.0619**	**5.9000e-004**	**0.0000**	**2.0742**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0000e-005	1.3000e-004	1.3200e-003	0.0000	2.7000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2474	0.2474	1.0000e-005	0.0000	0.2476
Total	**9.0000e-005**	**1.3000e-004**	**1.3200e-003**	**0.0000**	**2.7000e-004**	**0.0000**	**2.8000e-004**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**0.0000**	**0.2474**	**0.2474**	**1.0000e-005**	**0.0000**	**0.2476**

3.8 Architectural Coating - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2734					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6800e-003	0.0237	0.0188	3.0000e-005		1.9700e-003	1.9700e-003		1.9700e-003	1.9700e-003	0.0000	2.5533	2.5533	3.0000e-004	0.0000	2.5596
Total	**0.2771**	**0.0237**	**0.0188**	**3.0000e-005**		**1.9700e-003**	**1.9700e-003**		**1.9700e-003**	**1.9700e-003**	**0.0000**	**2.5533**	**2.5533**	**3.0000e-004**	**0.0000**	**2.5596**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-004	2.5000e-004	2.6400e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4948	0.4948	2.0000e-005	0.0000	0.4953
Total	**1.7000e-004**	**2.5000e-004**	**2.6400e-003**	**1.0000e-005**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4948**	**0.4948**	**2.0000e-005**	**0.0000**	**0.4953**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2734					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6800e-003	0.0237	0.0188	3.0000e-005		1.9700e-003	1.9700e-003		1.9700e-003	1.9700e-003	0.0000	2.5533	2.5533	3.0000e-004	0.0000	2.5596
Total	**0.2771**	**0.0237**	**0.0188**	**3.0000e-005**		**1.9700e-003**	**1.9700e-003**		**1.9700e-003**	**1.9700e-003**	**0.0000**	**2.5533**	**2.5533**	**3.0000e-004**	**0.0000**	**2.5596**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-004	2.5000e-004	2.6400e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4948	0.4948	2.0000e-005	0.0000	0.4953
Total	**1.7000e-004**	**2.5000e-004**	**2.6400e-003**	**1.0000e-005**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4948**	**0.4948**	**2.0000e-005**	**0.0000**	**0.4953**

One Stop Student Center

Orange County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	58.99	1000sqft	1.35	58,991.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2016
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - modified

Construction Phase - modified

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Demolition -

Grading - modified

Architectural Coating - modified

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	2.00	1.00
tblConstructionPhase	PhaseEndDate	8/24/2015	8/21/2015
tblConstructionPhase	PhaseStartDate	8/22/2015	8/21/2015
tblGrading	AcresOfGrading	3.00	1.50
tblLandUse	LandUseSquareFeet	58,990.00	58,991.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2016

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					

2015	3.7916	25.7823	17.6028	0.0314	3.2486	1.5036	4.6176	0.5332	1.4514	1.8237	0.0000	3,178.7309	3,178.7309	0.5143	0.0000	3,189.5313
2016	27.7285	21.5229	17.1019	0.0275	0.3419	1.3813	1.7232	0.0919	1.3320	1.4239	0.0000	2,547.4525	2,547.4525	0.4648	0.0000	2,557.2130
Total	**31.5201**	**47.3052**	**34.7047**	**0.0589**	**3.5905**	**2.8849**	**6.3409**	**0.6251**	**2.7834**	**3.2476**	**0.0000**	**5,726.1834**	**5,726.1834**	**0.9791**	**0.0000**	**5,746.7443**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	3.7916	25.7823	17.6028	0.0314	3.2486	1.5036	4.6176	0.5332	1.4514	1.8237	0.0000	3,178.7309	3,178.7309	0.5143	0.0000	3,189.5313
2016	27.7285	21.5229	17.1019	0.0275	0.3419	1.3813	1.7232	0.0919	1.3320	1.4239	0.0000	2,547.4525	2,547.4525	0.4648	0.0000	2,557.2130
Total	**31.5201**	**47.3052**	**34.7047**	**0.0589**	**3.5905**	**2.8849**	**6.3409**	**0.6251**	**2.7834**	**3.2476**	**0.0000**	**5,726.1834**	**5,726.1834**	**0.9791**	**0.0000**	**5,746.7443**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/25/2015	8/21/2015	5	20	
2	Site Preparation	Site Preparation	8/21/2015	8/21/2015	5	1	
3	Grading	Grading	8/22/2015	8/27/2015	5	4	
4	Trenching	Trenching	8/28/2015	9/10/2015	5	10	

5	Building Construction	Building Construction	9/11/2015	6/16/2016	5	200	
6	Paving	Paving	6/17/2016	6/30/2016	5	10	
7	Architectural Coating	Architectural Coating	7/1/2016	7/28/2016	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 88,487; Non-Residential Outdoor: 29,496 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Crawler Tractors	1	8.00	208	0.43
Demolition	Rubber Tired Dozers	0	8.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Graders	0	8.00	174	0.41
Site Preparation	Rubber Tired Dozers	0	7.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Crawler Tractors	1	6.00	208	0.43
Grading	Graders	1	6.00	174	0.41
Grading	Rubber Tired Dozers	0	6.00	255	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Trenching	Plate Compactors	1	7.00	8	0.43
Trenching	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Trenching	Trenchers	1	7.00	80	0.50
Building Construction	Cranes	1	6.00	226	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45

Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	0	6.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	0	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	268.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	25.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.9034	0.0000	2.9034	0.4396	0.0000	0.4396			0.0000			0.0000
Off-Road	2.1446	21.5491	11.5190	0.0202		1.2989	1.2989		1.2260	1.2260		2,056.7117	2,056.7117	0.5007		2,067.2263

Total	**2.1446**	**21.5491**	**11.5190**	**0.0202**	**2.9034**	**1.2989**	**4.2023**	**0.4396**	**1.2260**	**1.6656**		**2,056.7117**	**2,056.7117**	**0.5007**		**2,067.2263**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2705	4.1836	2.8470	9.8700e-003	0.2334	0.0694	0.3028	0.0639	0.0638	0.1277		1,004.4366	1,004.4366	7.8300e-003		1,004.6012
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0381	0.0496	0.6036	1.3600e-003	0.1118	8.1000e-004	0.1126	0.0296	7.5000e-004	0.0304		117.5826	117.5826	5.7800e-003		117.7039
Total	**0.3087**	**4.2332**	**3.4506**	**0.0112**	**0.3452**	**0.0702**	**0.4154**	**0.0935**	**0.0646**	**0.1581**		**1,122.0192**	**1,122.0192**	**0.0136**		**1,122.3050**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.9034	0.0000	2.9034	0.4396	0.0000	0.4396			0.0000			0.0000
Off-Road	2.1446	21.5491	11.5190	0.0202		1.2989	1.2989		1.2260	1.2260	0.0000	2,056.7117	2,056.7117	0.5007		2,067.2263
Total	**2.1446**	**21.5491**	**11.5190**	**0.0202**	**2.9034**	**1.2989**	**4.2023**	**0.4396**	**1.2260**	**1.6656**	**0.0000**	**2,056.7117**	**2,056.7117**	**0.5007**		**2,067.2263**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2705	4.1836	2.8470	9.8700e-003	0.2334	0.0694	0.3028	0.0639	0.0638	0.1277		1,004.4366	1,004.4366	7.8300e-003		1,004.6012
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0381	0.0496	0.6036	1.3600e-003	0.1118	8.1000e-004	0.1126	0.0296	7.5000e-004	0.0304		117.5826	117.5826	5.7800e-003		117.7039
Total	**0.3087**	**4.2332**	**3.4506**	**0.0112**	**0.3452**	**0.0702**	**0.4154**	**0.0935**	**0.0646**	**0.1581**		**1,122.0192**	**1,122.0192**	**0.0136**		**1,122.3050**

3.3 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.4 Grading - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3977	0.0000	0.3977	0.0429	0.0000	0.0429			0.0000			0.0000
Off-Road	1.6454	18.4218	8.0062	0.0132		0.9736	0.9736		0.8957	0.8957		1,386.1546	1,386.1546	0.4138		1,394.8449
Total	**1.6454**	**18.4218**	**8.0062**	**0.0132**	**0.3977**	**0.9736**	**1.3713**	**0.0429**	**0.8957**	**0.9387**		**1,386.1546**	**1,386.1546**	**0.4138**		**1,394.8449**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0305	0.0396	0.4829	1.0900e-003	0.0894	6.5000e-004	0.0901	0.0237	6.0000e-004	0.0243		94.0661	94.0661	4.6200e-003		94.1631
Total	**0.0305**	**0.0396**	**0.4829**	**1.0900e-003**	**0.0894**	**6.5000e-004**	**0.0901**	**0.0237**	**6.0000e-004**	**0.0243**		**94.0661**	**94.0661**	**4.6200e-003**		**94.1631**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3977	0.0000	0.3977	0.0429	0.0000	0.0429			0.0000			0.0000
Off-Road	1.6454	18.4218	8.0062	0.0132		0.9736	0.9736		0.8957	0.8957	0.0000	1,386.1546	1,386.1546	0.4138		1,394.8449
Total	**1.6454**	**18.4218**	**8.0062**	**0.0132**	**0.3977**	**0.9736**	**1.3713**	**0.0429**	**0.8957**	**0.9387**	**0.0000**	**1,386.1546**	**1,386.1546**	**0.4138**		**1,394.8449**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0305	0.0396	0.4829	1.0900e-003	0.0894	6.5000e-004	0.0901	0.0237	6.0000e-004	0.0243		94.0661	94.0661	4.6200e-003		94.1631
Total	**0.0305**	**0.0396**	**0.4829**	**1.0900e-003**	**0.0894**	**6.5000e-004**	**0.0901**	**0.0237**	**6.0000e-004**	**0.0243**		**94.0661**	**94.0661**	**4.6200e-003**		**94.1631**

3.5 Trenching - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1701	10.6574	6.9070	8.9000e-003		0.8253	0.8253		0.7600	0.7600		921.4236	921.4236	0.2692		927.0770

Total	**1.1701**	**10.6574**	**6.9070**	**8.9000e-003**		**0.8253**	**0.8253**		**0.7600**	**0.7600**		**921.4236**	**921.4236**	**0.2692**		**927.0770**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0381	0.0496	0.6036	1.3600e-003	0.1118	8.1000e-004	0.1126	0.0296	7.5000e-004	0.0304		117.5826	117.5826	5.7800e-003		117.7039
Total	**0.0381**	**0.0496**	**0.6036**	**1.3600e-003**	**0.1118**	**8.1000e-004**	**0.1126**	**0.0296**	**7.5000e-004**	**0.0304**		**117.5826**	**117.5826**	**5.7800e-003**		**117.7039**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1701	10.6574	6.9070	8.9000e-003		0.8253	0.8253		0.7600	0.7600	0.0000	921.4236	921.4236	0.2692		927.0770
Total	**1.1701**	**10.6574**	**6.9070**	**8.9000e-003**		**0.8253**	**0.8253**		**0.7600**	**0.7600**	**0.0000**	**921.4236**	**921.4236**	**0.2692**		**927.0770**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0381	0.0496	0.6036	1.3600e-003	0.1118	8.1000e-004	0.1126	0.0296	7.5000e-004	0.0304		117.5826	117.5826	5.7800e-003		117.7039
Total	**0.0381**	**0.0496**	**0.6036**	**1.3600e-003**	**0.1118**	**8.1000e-004**	**0.1126**	**0.0296**	**7.5000e-004**	**0.0304**		**117.5826**	**117.5826**	**5.7800e-003**		**117.7039**

3.6 Building Construction - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.6000	21.5642	15.0041	0.0220		1.4851	1.4851		1.4344	1.4344		2,055.6247	2,055.6247	0.4741		2,065.5812
Total	**3.6000**	**21.5642**	**15.0041**	**0.0220**		**1.4851**	**1.4851**		**1.4344**	**1.4344**		**2,055.6247**	**2,055.6247**	**0.4741**		**2,065.5812**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0962	0.9790	1.0898	2.1700e-003	0.0625	0.0165	0.0790	0.0178	0.0152	0.0330		219.2567	219.2567	1.7000e-003		219.2924
Worker	0.0954	0.1239	1.5090	3.3900e-003	0.2794	2.0300e-003	0.2815	0.0741	1.8700e-003	0.0760		293.9564	293.9564	0.0144		294.2597
Total	**0.1916**	**1.1029**	**2.5987**	**5.5600e-003**	**0.3419**	**0.0185**	**0.3604**	**0.0919**	**0.0170**	**0.1089**		**513.2131**	**513.2131**	**0.0161**		**513.5521**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.6000	21.5642	15.0041	0.0220		1.4851	1.4851		1.4344	1.4344	0.0000	2,055.6247	2,055.6247	0.4741		2,065.5812
Total	**3.6000**	**21.5642**	**15.0041**	**0.0220**		**1.4851**	**1.4851**		**1.4344**	**1.4344**	**0.0000**	**2,055.6247**	**2,055.6247**	**0.4741**		**2,065.5812**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0962	0.9790	1.0898	2.1700e-003	0.0625	0.0165	0.0790	0.0178	0.0152	0.0330		219.2567	219.2567	1.7000e-003		219.2924
Worker	0.0954	0.1239	1.5090	3.3900e-003	0.2794	2.0300e-003	0.2815	0.0741	1.8700e-003	0.0760		293.9564	293.9564	0.0144		294.2597
Total	**0.1916**	**1.1029**	**2.5987**	**5.5600e-003**	**0.3419**	**0.0185**	**0.3604**	**0.0919**	**0.0170**	**0.1089**		**513.2131**	**513.2131**	**0.0161**		**513.5521**

3.6 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.2915	20.5459	14.7074	0.0220		1.3656	1.3656		1.3176	1.3176		2,046.9432	2,046.9432	0.4499		2,056.3913
Total	**3.2915**	**20.5459**	**14.7074**	**0.0220**		**1.3656**	**1.3656**		**1.3176**	**1.3176**		**2,046.9432**	**2,046.9432**	**0.4499**		**2,056.3913**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0874	0.8650	1.0221	2.1600e-003	0.0625	0.0137	0.0762	0.0178	0.0126	0.0304		216.8589	216.8589	1.5400e-003		216.8912
Worker	0.0867	0.1121	1.3724	3.3900e-003	0.2794	1.9500e-003	0.2814	0.0741	1.8000e-003	0.0759		283.6504	283.6504	0.0133		283.9305
Total	**0.1742**	**0.9771**	**2.3946**	**5.5500e-003**	**0.3419**	**0.0157**	**0.3576**	**0.0919**	**0.0144**	**0.1063**		**500.5093**	**500.5093**	**0.0149**		**500.8217**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.2915	20.5459	14.7074	0.0220		1.3656	1.3656		1.3176	1.3176	0.0000	2,046.9432	2,046.9432	0.4499		2,056.3913
Total	**3.2915**	**20.5459**	**14.7074**	**0.0220**		**1.3656**	**1.3656**		**1.3176**	**1.3176**	**0.0000**	**2,046.9432**	**2,046.9432**	**0.4499**		**2,056.3913**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0874	0.8650	1.0221	2.1600e-003	0.0625	0.0137	0.0762	0.0178	0.0126	0.0304		216.8589	216.8589	1.5400e-003		216.8912
Worker	0.0867	0.1121	1.3724	3.3900e-003	0.2794	1.9500e-003	0.2814	0.0741	1.8000e-003	0.0759		283.6504	283.6504	0.0133		283.9305
Total	**0.1742**	**0.9771**	**2.3946**	**5.5500e-003**	**0.3419**	**0.0157**	**0.3576**	**0.0919**	**0.0144**	**0.1063**		**500.5093**	**500.5093**	**0.0149**		**500.8217**

3.7 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3510	3.8441	2.7745	4.5400e-003		0.1882	0.1882		0.1740	0.1740		454.5712	454.5712	0.1296		457.2932

Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.3510**	**3.8441**	**2.7745**	**4.5400e-003**		**0.1882**	**0.1882**		**0.1740**	**0.1740**		**454.5712**	**454.5712**	**0.1296**		**457.2932**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0174	0.0224	0.2745	6.8000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.6000e-004	0.0152		56.7301	56.7301	2.6700e-003		56.7861
Total	**0.0174**	**0.0224**	**0.2745**	**6.8000e-004**	**0.0559**	**3.9000e-004**	**0.0563**	**0.0148**	**3.6000e-004**	**0.0152**		**56.7301**	**56.7301**	**2.6700e-003**		**56.7861**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3510	3.8441	2.7745	4.5400e-003		0.1882	0.1882		0.1740	0.1740	0.0000	454.5712	454.5712	0.1296		457.2932
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.3510**	**3.8441**	**2.7745**	**4.5400e-003**		**0.1882**	**0.1882**		**0.1740**	**0.1740**	**0.0000**	**454.5712**	**454.5712**	**0.1296**		**457.2932**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0174	0.0224	0.2745	6.8000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.6000e-004	0.0152		56.7301	56.7301	2.6700e-003		56.7861
Total	**0.0174**	**0.0224**	**0.2745**	**6.8000e-004**	**0.0559**	**3.9000e-004**	**0.0563**	**0.0148**	**3.6000e-004**	**0.0152**		**56.7301**	**56.7301**	**2.6700e-003**		**56.7861**

3.8 Architectural Coating - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	27.3427					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449
Total	**27.7111**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**		**281.4481**	**281.4481**	**0.0332**		**282.1449**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0174	0.0224	0.2745	6.8000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.6000e-004	0.0152		56.7301	56.7301	2.6700e-003		56.7861
Total	**0.0174**	**0.0224**	**0.2745**	**6.8000e-004**	**0.0559**	**3.9000e-004**	**0.0563**	**0.0148**	**3.6000e-004**	**0.0152**		**56.7301**	**56.7301**	**2.6700e-003**		**56.7861**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	27.3427					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332		282.1449
Total	**27.7111**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**	**0.0000**	**281.4481**	**281.4481**	**0.0332**		**282.1449**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0174	0.0224	0.2745	6.8000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.6000e-004	0.0152		56.7301	56.7301	2.6700e-003		56.7861
Total	**0.0174**	**0.0224**	**0.2745**	**6.8000e-004**	**0.0559**	**3.9000e-004**	**0.0563**	**0.0148**	**3.6000e-004**	**0.0152**		**56.7301**	**56.7301**	**2.6700e-003**		**56.7861**

One Stop Student Center

Orange County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	58.99	1000sqft	1.35	58,991.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2016
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - modified

Construction Phase - modified

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Demolition -

Grading - modified

Architectural Coating - modified

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	2.00	1.00
tblConstructionPhase	PhaseEndDate	8/24/2015	8/21/2015
tblConstructionPhase	PhaseStartDate	8/22/2015	8/21/2015
tblGrading	AcresOfGrading	3.00	1.50
tblLandUse	LandUseSquareFeet	58,990.00	58,991.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2016

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					

2015	3.8072	25.9309	17.7297	0.0313	3.2486	1.5038	4.6179	0.5332	1.4516	1.8239	0.0000	3,170.1244	3,170.1244	0.5144	0.0000	3,180.9270
2016	27.7294	21.5545	17.2285	0.0273	0.3419	1.3814	1.7234	0.0919	1.3321	1.4240	0.0000	2,530.6155	2,530.6155	0.4648	0.0000	2,540.3770
Total	**31.5366**	**47.4854**	**34.9582**	**0.0586**	**3.5905**	**2.8852**	**6.3413**	**0.6251**	**2.7837**	**3.2479**	**0.0000**	**5,700.7400**	**5,700.7400**	**0.9792**	**0.0000**	**5,721.3040**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	3.8072	25.9309	17.7297	0.0313	3.2486	1.5038	4.6179	0.5332	1.4516	1.8239	0.0000	3,170.1244	3,170.1244	0.5144	0.0000	3,180.9270
2016	27.7294	21.5545	17.2285	0.0273	0.3419	1.3814	1.7234	0.0919	1.3321	1.4240	0.0000	2,530.6155	2,530.6155	0.4648	0.0000	2,540.3770
Total	**31.5366**	**47.4854**	**34.9582**	**0.0586**	**3.5905**	**2.8852**	**6.3413**	**0.6251**	**2.7837**	**3.2479**	**0.0000**	**5,700.7400**	**5,700.7400**	**0.9792**	**0.0000**	**5,721.3040**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/25/2015	8/21/2015	5	20	
2	Site Preparation	Site Preparation	8/21/2015	8/21/2015	5	1	
3	Grading	Grading	8/22/2015	8/27/2015	5	4	
4	Trenching	Trenching	8/28/2015	9/10/2015	5	10	

5	Building Construction	Building Construction	9/11/2015	6/16/2016	5	200	
6	Paving	Paving	6/17/2016	6/30/2016	5	10	
7	Architectural Coating	Architectural Coating	7/1/2016	7/28/2016	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 88,487; Non-Residential Outdoor: 29,496 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Crawler Tractors	1	8.00	208	0.43
Demolition	Rubber Tired Dozers	0	8.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Graders	0	8.00	174	0.41
Site Preparation	Rubber Tired Dozers	0	7.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Crawler Tractors	1	6.00	208	0.43
Grading	Graders	1	6.00	174	0.41
Grading	Rubber Tired Dozers	0	6.00	255	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Trenching	Plate Compactors	1	7.00	8	0.43
Trenching	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Trenching	Trenchers	1	7.00	80	0.50
Building Construction	Cranes	1	6.00	226	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45

Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	0	6.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	0	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	268.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	25.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.9034	0.0000	2.9034	0.4396	0.0000	0.4396			0.0000			0.0000
Off-Road	2.1446	21.5491	11.5190	0.0202		1.2989	1.2989		1.2260	1.2260		2,056.7117	2,056.7117	0.5007		2,067.2263

Total	**2.1446**	**21.5491**	**11.5190**	**0.0202**	**2.9034**	**1.2989**	**4.2023**	**0.4396**	**1.2260**	**1.6656**		**2,056.7117**	**2,056.7117**	**0.5007**		**2,067.2263**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2893	4.3273	3.2465	9.8500e-003	0.2334	0.0696	0.3030	0.0639	0.0640	0.1279		1,002.0491	1,002.0491	7.9300e-003		1,002.2157
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0402	0.0545	0.5702	1.2800e-003	0.1118	8.1000e-004	0.1126	0.0296	7.5000e-004	0.0304		111.3636	111.3636	5.7800e-003		111.4850
Total	**0.3295**	**4.3818**	**3.8166**	**0.0111**	**0.3452**	**0.0704**	**0.4156**	**0.0935**	**0.0648**	**0.1583**		**1,113.4128**	**1,113.4128**	**0.0137**		**1,113.7007**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.9034	0.0000	2.9034	0.4396	0.0000	0.4396			0.0000			0.0000
Off-Road	2.1446	21.5491	11.5190	0.0202		1.2989	1.2989		1.2260	1.2260	0.0000	2,056.7117	2,056.7117	0.5007		2,067.2263
Total	**2.1446**	**21.5491**	**11.5190**	**0.0202**	**2.9034**	**1.2989**	**4.2023**	**0.4396**	**1.2260**	**1.6656**	**0.0000**	**2,056.7117**	**2,056.7117**	**0.5007**		**2,067.2263**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2893	4.3273	3.2465	9.8500e-003	0.2334	0.0696	0.3030	0.0639	0.0640	0.1279		1,002.0491	1,002.0491	7.9300e-003		1,002.2157
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0402	0.0545	0.5702	1.2800e-003	0.1118	8.1000e-004	0.1126	0.0296	7.5000e-004	0.0304		111.3636	111.3636	5.7800e-003		111.4850
Total	**0.3295**	**4.3818**	**3.8166**	**0.0111**	**0.3452**	**0.0704**	**0.4156**	**0.0935**	**0.0648**	**0.1583**		**1,113.4128**	**1,113.4128**	**0.0137**		**1,113.7007**

3.3 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.4 Grading - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3977	0.0000	0.3977	0.0429	0.0000	0.0429			0.0000			0.0000
Off-Road	1.6454	18.4218	8.0062	0.0132		0.9736	0.9736		0.8957	0.8957		1,386.1546	1,386.1546	0.4138		1,394.8449
Total	**1.6454**	**18.4218**	**8.0062**	**0.0132**	**0.3977**	**0.9736**	**1.3713**	**0.0429**	**0.8957**	**0.9387**		**1,386.1546**	**1,386.1546**	**0.4138**		**1,394.8449**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0322	0.0436	0.4561	1.0300e-003	0.0894	6.5000e-004	0.0901	0.0237	6.0000e-004	0.0243		89.0909	89.0909	4.6200e-003		89.1880
Total	**0.0322**	**0.0436**	**0.4561**	**1.0300e-003**	**0.0894**	**6.5000e-004**	**0.0901**	**0.0237**	**6.0000e-004**	**0.0243**		**89.0909**	**89.0909**	**4.6200e-003**		**89.1880**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3977	0.0000	0.3977	0.0429	0.0000	0.0429			0.0000			0.0000
Off-Road	1.6454	18.4218	8.0062	0.0132		0.9736	0.9736		0.8957	0.8957	0.0000	1,386.1546	1,386.1546	0.4138		1,394.8449
Total	**1.6454**	**18.4218**	**8.0062**	**0.0132**	**0.3977**	**0.9736**	**1.3713**	**0.0429**	**0.8957**	**0.9387**	**0.0000**	**1,386.1546**	**1,386.1546**	**0.4138**		**1,394.8449**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0322	0.0436	0.4561	1.0300e-003	0.0894	6.5000e-004	0.0901	0.0237	6.0000e-004	0.0243		89.0909	89.0909	4.6200e-003		89.1880
Total	**0.0322**	**0.0436**	**0.4561**	**1.0300e-003**	**0.0894**	**6.5000e-004**	**0.0901**	**0.0237**	**6.0000e-004**	**0.0243**		**89.0909**	**89.0909**	**4.6200e-003**		**89.1880**

3.5 Trenching - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1701	10.6574	6.9070	8.9000e-003		0.8253	0.8253		0.7600	0.7600		921.4236	921.4236	0.2692		927.0770

Total	**1.1701**	**10.6574**	**6.9070**	**8.9000e-003**		**0.8253**	**0.8253**		**0.7600**	**0.7600**		**921.4236**	**921.4236**	**0.2692**		**927.0770**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0402	0.0545	0.5702	1.2800e-003	0.1118	8.1000e-004	0.1126	0.0296	7.5000e-004	0.0304		111.3636	111.3636	5.7800e-003		111.4850
Total	**0.0402**	**0.0545**	**0.5702**	**1.2800e-003**	**0.1118**	**8.1000e-004**	**0.1126**	**0.0296**	**7.5000e-004**	**0.0304**		**111.3636**	**111.3636**	**5.7800e-003**		**111.4850**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1701	10.6574	6.9070	8.9000e-003		0.8253	0.8253		0.7600	0.7600	0.0000	921.4236	921.4236	0.2692		927.0770
Total	**1.1701**	**10.6574**	**6.9070**	**8.9000e-003**		**0.8253**	**0.8253**		**0.7600**	**0.7600**	**0.0000**	**921.4236**	**921.4236**	**0.2692**		**927.0770**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0402	0.0545	0.5702	1.2800e-003	0.1118	8.1000e-004	0.1126	0.0296	7.5000e-004	0.0304		111.3636	111.3636	5.7800e-003		111.4850
Total	**0.0402**	**0.0545**	**0.5702**	**1.2800e-003**	**0.1118**	**8.1000e-004**	**0.1126**	**0.0296**	**7.5000e-004**	**0.0304**		**111.3636**	**111.3636**	**5.7800e-003**		**111.4850**

3.6 Building Construction - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.6000	21.5642	15.0041	0.0220		1.4851	1.4851		1.4344	1.4344		2,055.6247	2,055.6247	0.4741		2,065.5812
Total	**3.6000**	**21.5642**	**15.0041**	**0.0220**		**1.4851**	**1.4851**		**1.4344**	**1.4344**		**2,055.6247**	**2,055.6247**	**0.4741**		**2,065.5812**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1067	1.0028	1.3002	2.1500e-003	0.0625	0.0167	0.0792	0.0178	0.0154	0.0331		217.4163	217.4163	1.7500e-003		217.4530
Worker	0.1005	0.1362	1.4254	3.2100e-003	0.2794	2.0300e-003	0.2815	0.0741	1.8700e-003	0.0760		278.4091	278.4091	0.0144		278.7124
Total	**0.2072**	**1.1390**	**2.7256**	**5.3600e-003**	**0.3419**	**0.0187**	**0.3607**	**0.0919**	**0.0172**	**0.1091**		**495.8254**	**495.8254**	**0.0162**		**496.1654**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.6000	21.5642	15.0041	0.0220		1.4851	1.4851		1.4344	1.4344	0.0000	2,055.6247	2,055.6247	0.4741		2,065.5812
Total	**3.6000**	**21.5642**	**15.0041**	**0.0220**		**1.4851**	**1.4851**		**1.4344**	**1.4344**	**0.0000**	**2,055.6247**	**2,055.6247**	**0.4741**		**2,065.5812**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1067	1.0028	1.3002	2.1500e-003	0.0625	0.0167	0.0792	0.0178	0.0154	0.0331		217.4163	217.4163	1.7500e-003		217.4530
Worker	0.1005	0.1362	1.4254	3.2100e-003	0.2794	2.0300e-003	0.2815	0.0741	1.8700e-003	0.0760		278.4091	278.4091	0.0144		278.7124
Total	**0.2072**	**1.1390**	**2.7256**	**5.3600e-003**	**0.3419**	**0.0187**	**0.3607**	**0.0919**	**0.0172**	**0.1091**		**495.8254**	**495.8254**	**0.0162**		**496.1654**

3.6 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.2915	20.5459	14.7074	0.0220		1.3656	1.3656		1.3176	1.3176		2,046.9432	2,046.9432	0.4499		2,056.3913
Total	**3.2915**	**20.5459**	**14.7074**	**0.0220**		**1.3656**	**1.3656**		**1.3176**	**1.3176**		**2,046.9432**	**2,046.9432**	**0.4499**		**2,056.3913**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0969	0.8854	1.2284	2.1500e-003	0.0625	0.0139	0.0764	0.0178	0.0127	0.0305		215.0304	215.0304	1.5900e-003		215.0637
Worker	0.0913	0.1232	1.2928	3.2100e-003	0.2794	1.9500e-003	0.2814	0.0741	1.8000e-003	0.0759		268.6420	268.6420	0.0133		268.9221
Total	**0.1882**	**1.0086**	**2.5211**	**5.3600e-003**	**0.3419**	**0.0158**	**0.3577**	**0.0919**	**0.0145**	**0.1064**		**483.6723**	**483.6723**	**0.0149**		**483.9857**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.2915	20.5459	14.7074	0.0220		1.3656	1.3656		1.3176	1.3176	0.0000	2,046.9432	2,046.9432	0.4499		2,056.3913
Total	**3.2915**	**20.5459**	**14.7074**	**0.0220**		**1.3656**	**1.3656**		**1.3176**	**1.3176**	**0.0000**	**2,046.9432**	**2,046.9432**	**0.4499**		**2,056.3913**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0969	0.8854	1.2284	2.1500e-003	0.0625	0.0139	0.0764	0.0178	0.0127	0.0305		215.0304	215.0304	1.5900e-003		215.0637
Worker	0.0913	0.1232	1.2928	3.2100e-003	0.2794	1.9500e-003	0.2814	0.0741	1.8000e-003	0.0759		268.6420	268.6420	0.0133		268.9221
Total	**0.1882**	**1.0086**	**2.5211**	**5.3600e-003**	**0.3419**	**0.0158**	**0.3577**	**0.0919**	**0.0145**	**0.1064**		**483.6723**	**483.6723**	**0.0149**		**483.9857**

3.7 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3510	3.8441	2.7745	4.5400e-003		0.1882	0.1882		0.1740	0.1740		454.5712	454.5712	0.1296		457.2932

Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.3510**	**3.8441**	**2.7745**	**4.5400e-003**		**0.1882**	**0.1882**		**0.1740**	**0.1740**		**454.5712**	**454.5712**	**0.1296**		**457.2932**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0183	0.0247	0.2586	6.4000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.6000e-004	0.0152		53.7284	53.7284	2.6700e-003		53.7844
Total	**0.0183**	**0.0247**	**0.2586**	**6.4000e-004**	**0.0559**	**3.9000e-004**	**0.0563**	**0.0148**	**3.6000e-004**	**0.0152**		**53.7284**	**53.7284**	**2.6700e-003**		**53.7844**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3510	3.8441	2.7745	4.5400e-003		0.1882	0.1882		0.1740	0.1740	0.0000	454.5712	454.5712	0.1296		457.2932
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.3510**	**3.8441**	**2.7745**	**4.5400e-003**		**0.1882**	**0.1882**		**0.1740**	**0.1740**	**0.0000**	**454.5712**	**454.5712**	**0.1296**		**457.2932**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0183	0.0247	0.2586	6.4000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.6000e-004	0.0152		53.7284	53.7284	2.6700e-003		53.7844
Total	**0.0183**	**0.0247**	**0.2586**	**6.4000e-004**	**0.0559**	**3.9000e-004**	**0.0563**	**0.0148**	**3.6000e-004**	**0.0152**		**53.7284**	**53.7284**	**2.6700e-003**		**53.7844**

3.8 Architectural Coating - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	27.3427					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449
Total	**27.7111**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**		**281.4481**	**281.4481**	**0.0332**		**282.1449**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0183	0.0247	0.2586	6.4000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.6000e-004	0.0152		53.7284	53.7284	2.6700e-003		53.7844
Total	**0.0183**	**0.0247**	**0.2586**	**6.4000e-004**	**0.0559**	**3.9000e-004**	**0.0563**	**0.0148**	**3.6000e-004**	**0.0152**		**53.7284**	**53.7284**	**2.6700e-003**		**53.7844**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	27.3427					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332		282.1449
Total	**27.7111**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**	**0.0000**	**281.4481**	**281.4481**	**0.0332**		**282.1449**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0183	0.0247	0.2586	6.4000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.6000e-004	0.0152		53.7284	53.7284	2.6700e-003		53.7844
Total	**0.0183**	**0.0247**	**0.2586**	**6.4000e-004**	**0.0559**	**3.9000e-004**	**0.0563**	**0.0148**	**3.6000e-004**	**0.0152**		**53.7284**	**53.7284**	**2.6700e-003**		**53.7844**

CONSTRUCTION PHASE II

Annual, Summer, and Winter Emissions

Cosmetology Building

Orange County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	26.71	1000sqft	0.61	26,713.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - modified

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Demolition -

Grading - modified

Architectural Coating - modified

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblConstructionPhase	NumDays	5.00	20.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	2.00	4.00
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	PhaseEndDate	2/12/2015	8/28/2017
tblConstructionPhase	PhaseStartDate	1/16/2015	8/1/2017
tblGrading	AcresOfGrading	2.00	1.25
tblLandUse	LandUseSquareFeet	26,710.00	26,713.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2018

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Year	tons/yr										MT/yr					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2017	0.0789	0.7816	0.5239	8.8000e-004	0.0327	0.0483	0.0810	5.9900e-003	0.0448	0.0508	0.0000	79.1523	79.1523	0.0184	0.0000	79.5392
2018	0.1429	0.1775	0.1439	2.3000e-004	2.4800e-003	0.0112	0.0136	6.6000e-004	0.0104	0.0111	0.0000	20.4148	20.4148	4.9600e-003	0.0000	20.5190
Total	**0.2217**	**0.9591**	**0.6678**	**1.1100e-003**	**0.0352**	**0.0595**	**0.0946**	**6.6500e-003**	**0.0551**	**0.0618**	**0.0000**	**99.5671**	**99.5671**	**0.0234**	**0.0000**	**100.0583**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2017	0.0789	0.7816	0.5239	8.8000e-004	0.0327	0.0483	0.0810	5.9900e-003	0.0448	0.0508	0.0000	79.1522	79.1522	0.0184	0.0000	79.5392
2018	0.1429	0.1775	0.1439	2.3000e-004	2.4800e-003	0.0112	0.0136	6.6000e-004	0.0104	0.0111	0.0000	20.4148	20.4148	4.9600e-003	0.0000	20.5190
Total	**0.2217**	**0.9591**	**0.6678**	**1.1100e-003**	**0.0352**	**0.0595**	**0.0946**	**6.6500e-003**	**0.0551**	**0.0618**	**0.0000**	**99.5670**	**99.5670**	**0.0234**	**0.0000**	**100.0582**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description

1	Site Preparation	Site Preparation	1/15/2015	1/15/2015	5	1
2	Demolition	Demolition	8/1/2017	8/28/2017	5	20
3	Grading	Grading	8/29/2017	9/1/2017	5	4
4	Trenching	Trenching	9/2/2017	9/15/2017	5	10
5	Building Construction	Building Construction	9/16/2017	2/2/2018	5	100
6	Paving	Paving	2/3/2018	2/16/2018	5	10
7	Architectural Coating	Architectural Coating	2/17/2018	3/16/2018	5	20

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1.25

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 40,070; Non-Residential Outdoor: 13,357 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	0	8.00	174	0.41
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Crawler Tractors	1	8.00	208	0.43
Demolition	Rubber Tired Dozers	0	1.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Crawler Tractors	1	8.00	208	0.43
Grading	Rubber Tired Dozers	0	1.00	255	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Trenching	Plate Compactors	1	7.00	8	0.43
Trenching	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Trenching	Trenchers	1	7.00	80	0.50
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20

Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	0	7.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	0	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	10.00	0.00	211.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	11.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0229	0.0000	0.0229	3.4600e-003	0.0000	3.4600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0173	0.1791	0.1009	1.9000e-004		9.9700e-003	9.9700e-003		9.4200e-003	9.4200e-003	0.0000	16.8602	16.8602	3.9900e-003	0.0000	16.9441
Total	**0.0173**	**0.1791**	**0.1009**	**1.9000e-004**	**0.0229**	**9.9700e-003**	**0.0329**	**3.4600e-003**	**9.4200e-003**	**0.0129**	**0.0000**	**16.8602**	**16.8602**	**3.9900e-003**	**0.0000**	**16.9441**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	1.9000e-003	0.0281	0.0226	8.0000e-005	1.8100e-003	4.0000e-004	2.2100e-003	5.0000e-004	3.7000e-004	8.6000e-004	0.0000	6.9712	6.9712	5.0000e-005	0.0000	6.9722
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	4.6000e-004	4.8000e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9512	0.9512	4.0000e-005	0.0000	0.9522
Total	**2.2100e-003**	**0.0285**	**0.0274**	**9.0000e-005**	**2.9100e-003**	**4.1000e-004**	**3.3200e-003**	**7.9000e-004**	**3.8000e-004**	**1.1600e-003**	**0.0000**	**7.9224**	**7.9224**	**9.0000e-005**	**0.0000**	**7.9244**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0229	0.0000	0.0229	3.4600e-003	0.0000	3.4600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0173	0.1791	0.1009	1.9000e-004		9.9700e-003	9.9700e-003		9.4200e-003	9.4200e-003	0.0000	16.8602	16.8602	3.9900e-003	0.0000	16.9440
Total	**0.0173**	**0.1791**	**0.1009**	**1.9000e-004**	**0.0229**	**9.9700e-003**	**0.0329**	**3.4600e-003**	**9.4200e-003**	**0.0129**	**0.0000**	**16.8602**	**16.8602**	**3.9900e-003**	**0.0000**	**16.9440**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9000e-003	0.0281	0.0226	8.0000e-005	1.8100e-003	4.0000e-004	2.2100e-003	5.0000e-004	3.7000e-004	8.6000e-004	0.0000	6.9712	6.9712	5.0000e-005	0.0000	6.9722
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	4.6000e-004	4.8000e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9512	0.9512	4.0000e-005	0.0000	0.9522
Total	**2.2100e-003**	**0.0285**	**0.0274**	**9.0000e-005**	**2.9100e-003**	**4.1000e-004**	**3.3200e-003**	**7.9000e-004**	**3.8000e-004**	**1.1600e-003**	**0.0000**	**7.9224**	**7.9224**	**9.0000e-005**	**0.0000**	**7.9244**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.6000e-004	0.0000	6.6000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.4700e-003	0.0358	0.0202	4.0000e-005		1.9900e-003	1.9900e-003		1.8800e-003	1.8800e-003	0.0000	3.3721	3.3721	8.0000e-004	0.0000	3.3888
Total	**3.4700e-003**	**0.0358**	**0.0202**	**4.0000e-005**	**6.6000e-004**	**1.9900e-003**	**2.6500e-003**	**7.0000e-005**	**1.8800e-003**	**1.9500e-003**	**0.0000**	**3.3721**	**3.3721**	**8.0000e-004**	**0.0000**	**3.3888**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	9.0000e-005	9.6000e-004	0.0000	2.2000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1902	0.1902	1.0000e-005	0.0000	0.1904
Total	**6.0000e-005**	**9.0000e-005**	**9.6000e-004**	**0.0000**	**2.2000e-004**	**0.0000**	**2.2000e-004**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**0.1902**	**0.1902**	**1.0000e-005**	**0.0000**	**0.1904**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.6000e-004	0.0000	6.6000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.4700e-003	0.0358	0.0202	4.0000e-005		1.9900e-003	1.9900e-003		1.8800e-003	1.8800e-003	0.0000	3.3720	3.3720	8.0000e-004	0.0000	3.3888
Total	**3.4700e-003**	**0.0358**	**0.0202**	**4.0000e-005**	**6.6000e-004**	**1.9900e-003**	**2.6500e-003**	**7.0000e-005**	**1.8800e-003**	**1.9500e-003**	**0.0000**	**3.3720**	**3.3720**	**8.0000e-004**	**0.0000**	**3.3888**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	9.0000e-005	9.6000e-004	0.0000	2.2000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1902	0.1902	1.0000e-005	0.0000	0.1904
Total	**6.0000e-005**	**9.0000e-005**	**9.6000e-004**	**0.0000**	**2.2000e-004**	**0.0000**	**2.2000e-004**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**0.1902**	**0.1902**	**1.0000e-005**	**0.0000**	**0.1904**

3.5 Trenching - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.3000e-003	0.0484	0.0341	4.0000e-005		3.6600e-003	3.6600e-003		3.3700e-003	3.3700e-003	0.0000	4.0688	4.0688	1.2200e-003	0.0000	4.0944

Total	**5.3000e-003**	**0.0484**	**0.0341**	**4.0000e-005**		**3.6600e-003**	**3.6600e-003**		**3.3700e-003**	**3.3700e-003**	**0.0000**	**4.0688**	**4.0688**	**1.2200e-003**	**0.0000**	**4.0944**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	2.3000e-004	2.4000e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4756	0.4756	2.0000e-005	0.0000	0.4761
Total	**1.6000e-004**	**2.3000e-004**	**2.4000e-003**	**1.0000e-005**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4756**	**0.4756**	**2.0000e-005**	**0.0000**	**0.4761**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.3000e-003	0.0484	0.0341	4.0000e-005		3.6600e-003	3.6600e-003		3.3700e-003	3.3700e-003	0.0000	4.0688	4.0688	1.2200e-003	0.0000	4.0944
Total	**5.3000e-003**	**0.0484**	**0.0341**	**4.0000e-005**		**3.6600e-003**	**3.6600e-003**		**3.3700e-003**	**3.3700e-003**	**0.0000**	**4.0688**	**4.0688**	**1.2200e-003**	**0.0000**	**4.0944**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	2.3000e-004	2.4000e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4756	0.4756	2.0000e-005	0.0000	0.4761
Total	**1.6000e-004**	**2.3000e-004**	**2.4000e-003**	**1.0000e-005**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4756**	**0.4756**	**2.0000e-005**	**0.0000**	**0.4761**

3.6 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0478	0.4753	0.3015	4.2000e-004		0.0321	0.0321		0.0295	0.0295	0.0000	39.4466	39.4466	0.0121	0.0000	39.7004
Total	**0.0478**	**0.4753**	**0.3015**	**4.2000e-004**		**0.0321**	**0.0321**		**0.0295**	**0.0295**	**0.0000**	**39.4466**	**39.4466**	**0.0121**	**0.0000**	**39.7004**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2900e-003	0.0123	0.0167	3.0000e-005	9.2000e-004	1.8000e-004	1.1100e-003	2.6000e-004	1.7000e-004	4.3000e-004	0.0000	2.8926	2.8926	2.0000e-005	0.0000	2.8931
Worker	1.2800e-003	1.9000e-003	0.0198	5.0000e-005	4.5300e-003	3.0000e-005	4.5600e-003	1.2000e-003	3.0000e-005	1.2300e-003	0.0000	3.9238	3.9238	1.9000e-004	0.0000	3.9277
Total	**2.5700e-003**	**0.0142**	**0.0366**	**8.0000e-005**	**5.4500e-003**	**2.1000e-004**	**5.6700e-003**	**1.4600e-003**	**2.0000e-004**	**1.6600e-003**	**0.0000**	**6.8164**	**6.8164**	**2.1000e-004**	**0.0000**	**6.8207**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0478	0.4753	0.3015	4.2000e-004		0.0321	0.0321		0.0295	0.0295	0.0000	39.4465	39.4465	0.0121	0.0000	39.7004
Total	**0.0478**	**0.4753**	**0.3015**	**4.2000e-004**		**0.0321**	**0.0321**		**0.0295**	**0.0295**	**0.0000**	**39.4465**	**39.4465**	**0.0121**	**0.0000**	**39.7004**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2900e-003	0.0123	0.0167	3.0000e-005	9.2000e-004	1.8000e-004	1.1100e-003	2.6000e-004	1.7000e-004	4.3000e-004	0.0000	2.8926	2.8926	2.0000e-005	0.0000	2.8931
Worker	1.2800e-003	1.9000e-003	0.0198	5.0000e-005	4.5300e-003	3.0000e-005	4.5600e-003	1.2000e-003	3.0000e-005	1.2300e-003	0.0000	3.9238	3.9238	1.9000e-004	0.0000	3.9277
Total	**2.5700e-003**	**0.0142**	**0.0366**	**8.0000e-005**	**5.4500e-003**	**2.1000e-004**	**5.6700e-003**	**1.4600e-003**	**2.0000e-004**	**1.6600e-003**	**0.0000**	**6.8164**	**6.8164**	**2.1000e-004**	**0.0000**	**6.8207**

3.6 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0135	0.1370	0.0966	1.4000e-004		8.8200e-003	8.8200e-003		8.1100e-003	8.1100e-003	0.0000	12.9302	12.9302	4.0300e-003	0.0000	13.0147
Total	**0.0135**	**0.1370**	**0.0966**	**1.4000e-004**		**8.8200e-003**	**8.8200e-003**		**8.1100e-003**	**8.1100e-003**	**0.0000**	**12.9302**	**12.9302**	**4.0300e-003**	**0.0000**	**13.0147**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0000e-004	3.7700e-003	5.3300e-003	1.0000e-005	3.1000e-004	6.0000e-005	3.7000e-004	9.0000e-005	5.0000e-005	1.4000e-004	0.0000	0.9478	0.9478	1.0000e-005	0.0000	0.9480
Worker	3.9000e-004	5.8000e-004	6.0300e-003	2.0000e-005	1.5100e-003	1.0000e-005	1.5200e-003	4.0000e-004	1.0000e-005	4.1000e-004	0.0000	1.2589	1.2589	6.0000e-005	0.0000	1.2601
Total	**7.9000e-004**	**4.3500e-003**	**0.0114**	**3.0000e-005**	**1.8200e-003**	**7.0000e-005**	**1.8900e-003**	**4.9000e-004**	**6.0000e-005**	**5.5000e-004**	**0.0000**	**2.2067**	**2.2067**	**7.0000e-005**	**0.0000**	**2.2081**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0135	0.1370	0.0966	1.4000e-004		8.8200e-003	8.8200e-003		8.1100e-003	8.1100e-003	0.0000	12.9302	12.9302	4.0300e-003	0.0000	13.0147
Total	**0.0135**	**0.1370**	**0.0966**	**1.4000e-004**		**8.8200e-003**	**8.8200e-003**		**8.1100e-003**	**8.1100e-003**	**0.0000**	**12.9302**	**12.9302**	**4.0300e-003**	**0.0000**	**13.0147**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0000e-004	3.7700e-003	5.3300e-003	1.0000e-005	3.1000e-004	6.0000e-005	3.7000e-004	9.0000e-005	5.0000e-005	1.4000e-004	0.0000	0.9478	0.9478	1.0000e-005	0.0000	0.9480
Worker	3.9000e-004	5.8000e-004	6.0300e-003	2.0000e-005	1.5100e-003	1.0000e-005	1.5200e-003	4.0000e-004	1.0000e-005	4.1000e-004	0.0000	1.2589	1.2589	6.0000e-005	0.0000	1.2601
Total	**7.9000e-004**	**4.3500e-003**	**0.0114**	**3.0000e-005**	**1.8200e-003**	**7.0000e-005**	**1.8900e-003**	**4.9000e-004**	**6.0000e-005**	**5.5000e-004**	**0.0000**	**2.2067**	**2.2067**	**7.0000e-005**	**0.0000**	**2.2081**

3.7 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.6100e-003	0.0159	0.0148	3.0000e-005		7.5000e-004	7.5000e-004		7.0000e-004	7.0000e-004	0.0000	2.1753	2.1753	6.1000e-004	0.0000	2.1880

Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.6100e-003**	**0.0159**	**0.0148**	**3.0000e-005**		**7.5000e-004**	**7.5000e-004**		**7.0000e-004**	**7.0000e-004**	**0.0000**	**2.1753**	**2.1753**	**6.1000e-004**	**0.0000**	**2.1880**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	1.7000e-004	1.7600e-003	1.0000e-005	4.4000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3662	0.3662	2.0000e-005	0.0000	0.3666
Total	**1.1000e-004**	**1.7000e-004**	**1.7600e-003**	**1.0000e-005**	**4.4000e-004**	**0.0000**	**4.4000e-004**	**1.2000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**0.3662**	**0.3662**	**2.0000e-005**	**0.0000**	**0.3666**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.6100e-003	0.0159	0.0148	3.0000e-005		7.5000e-004	7.5000e-004		7.0000e-004	7.0000e-004	0.0000	2.1753	2.1753	6.1000e-004	0.0000	2.1880
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.6100e-003**	**0.0159**	**0.0148**	**3.0000e-005**		**7.5000e-004**	**7.5000e-004**		**7.0000e-004**	**7.0000e-004**	**0.0000**	**2.1753**	**2.1753**	**6.1000e-004**	**0.0000**	**2.1880**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	1.7000e-004	1.7600e-003	1.0000e-005	4.4000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3662	0.3662	2.0000e-005	0.0000	0.3666
Total	**1.1000e-004**	**1.7000e-004**	**1.7600e-003**	**1.0000e-005**	**4.4000e-004**	**0.0000**	**4.4000e-004**	**1.2000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**0.3662**	**0.3662**	**2.0000e-005**	**0.0000**	**0.3666**

3.8 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1238					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9900e-003	0.0201	0.0185	3.0000e-005		1.5100e-003	1.5100e-003		1.5100e-003	1.5100e-003	0.0000	2.5533	2.5533	2.4000e-004	0.0000	2.5584
Total	**0.1268**	**0.0201**	**0.0185**	**3.0000e-005**		**1.5100e-003**	**1.5100e-003**		**1.5100e-003**	**1.5100e-003**	**0.0000**	**2.5533**	**2.5533**	**2.4000e-004**	**0.0000**	**2.5584**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	8.0000e-005	8.8000e-004	0.0000	2.2000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1831	0.1831	1.0000e-005	0.0000	0.1833
Total	**6.0000e-005**	**8.0000e-005**	**8.8000e-004**	**0.0000**	**2.2000e-004**	**0.0000**	**2.2000e-004**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**0.1831**	**0.1831**	**1.0000e-005**	**0.0000**	**0.1833**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1238					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9900e-003	0.0201	0.0185	3.0000e-005		1.5100e-003	1.5100e-003		1.5100e-003	1.5100e-003	0.0000	2.5533	2.5533	2.4000e-004	0.0000	2.5584
Total	**0.1268**	**0.0201**	**0.0185**	**3.0000e-005**		**1.5100e-003**	**1.5100e-003**		**1.5100e-003**	**1.5100e-003**	**0.0000**	**2.5533**	**2.5533**	**2.4000e-004**	**0.0000**	**2.5584**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	8.0000e-005	8.8000e-004	0.0000	2.2000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1831	0.1831	1.0000e-005	0.0000	0.1833
Total	**6.0000e-005**	**8.0000e-005**	**8.8000e-004**	**0.0000**	**2.2000e-004**	**0.0000**	**2.2000e-004**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**0.1831**	**0.1831**	**1.0000e-005**	**0.0000**	**0.1833**

Cosmetology Building

Orange County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	26.71	1000sqft	0.61	26,713.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - modified

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Demolition -

Grading - modified

Architectural Coating - modified

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblConstructionPhase	NumDays	5.00	20.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	2.00	4.00
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	PhaseEndDate	2/12/2015	8/28/2017
tblConstructionPhase	PhaseStartDate	1/16/2015	8/1/2017
tblGrading	AcresOfGrading	2.00	1.25
tblLandUse	LandUseSquareFeet	26,710.00	26,713.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2018

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Year	lb/day										lb/day					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2017	1.9470	20.6196	12.6031	0.0277	2.5831	1.0376	3.6207	0.4263	0.9791	1.4054	0.0000	2,736.8043	2,736.8043	0.4504	0.0000	2,746.2628
2018	12.6862	11.2876	8.5935	0.0137	0.1480	0.7109	0.8589	0.0397	0.6541	0.6938	0.0000	1,339.6169	1,339.6169	0.3607	0.0000	1,347.1906
Total	**14.6332**	**31.9071**	**21.1966**	**0.0414**	**2.7311**	**1.7485**	**4.4796**	**0.4661**	**1.6332**	**2.0992**	**0.0000**	**4,076.4212**	**4,076.4212**	**0.8111**	**0.0000**	**4,093.4533**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2017	1.9470	20.6196	12.6031	0.0277	2.5831	1.0376	3.6207	0.4263	0.9791	1.4054	0.0000	2,736.8043	2,736.8043	0.4504	0.0000	2,746.2628
2018	12.6862	11.2876	8.5935	0.0137	0.1480	0.7109	0.8589	0.0397	0.6541	0.6938	0.0000	1,339.6169	1,339.6169	0.3607	0.0000	1,347.1906
Total	**14.6332**	**31.9071**	**21.1966**	**0.0414**	**2.7311**	**1.7485**	**4.4796**	**0.4661**	**1.6332**	**2.0992**	**0.0000**	**4,076.4212**	**4,076.4212**	**0.8111**	**0.0000**	**4,093.4533**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description

1	Site Preparation	Site Preparation	1/15/2015	1/15/2015	5	1	
2	Demolition	Demolition	8/1/2017	8/28/2017	5	20	
3	Grading	Grading	8/29/2017	9/1/2017	5	4	
4	Trenching	Trenching	9/2/2017	9/15/2017	5	10	
5	Building Construction	Building Construction	9/16/2017	2/2/2018	5	100	
6	Paving	Paving	2/3/2018	2/16/2018	5	10	
7	Architectural Coating	Architectural Coating	2/17/2018	3/16/2018	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1.25

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 40,070; Non-Residential Outdoor: 13,357 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	0	8.00	174	0.41
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Crawler Tractors	1	8.00	208	0.43
Demolition	Rubber Tired Dozers	0	1.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Crawler Tractors	1	8.00	208	0.43
Grading	Rubber Tired Dozers	0	1.00	255	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Trenching	Plate Compactors	1	7.00	8	0.43
Trenching	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Trenching	Trenchers	1	7.00	80	0.50
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20

Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	0	7.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	0	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	10.00	0.00	211.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	11.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000

Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.2876	0.0000	2.2876	0.3464	0.0000	0.3464			0.0000			0.0000
Off-Road	1.7336	17.9126	10.0875	0.0186		0.9968	0.9968		0.9416	0.9416		1,858.5228	1,858.5228	0.4400		1,867.7628
Total	**1.7336**	**17.9126**	**10.0875**	**0.0186**	**2.2876**	**0.9968**	**3.2844**	**0.3464**	**0.9416**	**1.2880**		**1,858.5228**	**1,858.5228**	**0.4400**		**1,867.7628**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.1818	2.6662	2.0148	7.7500e-003	0.1838	0.0400	0.2238	0.0503	0.0368	0.0871		769.2086	769.2086	5.4500e-003		769.3231
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0316	0.0407	0.5007	1.3600e-003	0.1118	7.6000e-004	0.1125	0.0296	7.1000e-004	0.0304		109.0729	109.0729	4.9500e-003		109.1769
Total	**0.2134**	**2.7069**	**2.5155**	**9.1100e-003**	**0.2956**	**0.0408**	**0.3364**	**0.0800**	**0.0375**	**0.1175**		**878.2815**	**878.2815**	**0.0104**		**878.5000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.2876	0.0000	2.2876	0.3464	0.0000	0.3464			0.0000			0.0000
Off-Road	1.7336	17.9126	10.0875	0.0186		0.9968	0.9968		0.9416	0.9416	0.0000	1,858.5228	1,858.5228	0.4400		1,867.7628
Total	**1.7336**	**17.9126**	**10.0875**	**0.0186**	**2.2876**	**0.9968**	**3.2844**	**0.3464**	**0.9416**	**1.2880**	**0.0000**	**1,858.5228**	**1,858.5228**	**0.4400**		**1,867.7628**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1818	2.6662	2.0148	7.7500e-003	0.1838	0.0400	0.2238	0.0503	0.0368	0.0871		769.2086	769.2086	5.4500e-003		769.3231
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0316	0.0407	0.5007	1.3600e-003	0.1118	7.6000e-004	0.1125	0.0296	7.1000e-004	0.0304		109.0729	109.0729	4.9500e-003		109.1769
Total	**0.2134**	**2.7069**	**2.5155**	**9.1100e-003**	**0.2956**	**0.0408**	**0.3364**	**0.0800**	**0.0375**	**0.1175**		**878.2815**	**878.2815**	**0.0104**		**878.5000**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3314	0.0000	0.3314	0.0358	0.0000	0.0358			0.0000			0.0000
Off-Road	1.7336	17.9126	10.0875	0.0186		0.9968	0.9968		0.9416	0.9416		1,858.5228	1,858.5228	0.4400		1,867.7628
Total	**1.7336**	**17.9126**	**10.0875**	**0.0186**	**0.3314**	**0.9968**	**1.3282**	**0.0358**	**0.9416**	**0.9774**		**1,858.5228**	**1,858.5228**	**0.4400**		**1,867.7628**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0316	0.0407	0.5007	1.3600e-003	0.1118	7.6000e-004	0.1125	0.0296	7.1000e-004	0.0304		109.0729	109.0729	4.9500e-003		109.1769
Total	**0.0316**	**0.0407**	**0.5007**	**1.3600e-003**	**0.1118**	**7.6000e-004**	**0.1125**	**0.0296**	**7.1000e-004**	**0.0304**		**109.0729**	**109.0729**	**4.9500e-003**		**109.1769**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3314	0.0000	0.3314	0.0358	0.0000	0.0358			0.0000			0.0000
Off-Road	1.7336	17.9126	10.0875	0.0186		0.9968	0.9968		0.9416	0.9416	0.0000	1,858.5228	1,858.5228	0.4400		1,867.7628
Total	**1.7336**	**17.9126**	**10.0875**	**0.0186**	**0.3314**	**0.9968**	**1.3282**	**0.0358**	**0.9416**	**0.9774**	**0.0000**	**1,858.5228**	**1,858.5228**	**0.4400**		**1,867.7628**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0316	0.0407	0.5007	1.3600e-003	0.1118	7.6000e-004	0.1125	0.0296	7.1000e-004	0.0304		109.0729	109.0729	4.9500e-003		109.1769
Total	**0.0316**	**0.0407**	**0.5007**	**1.3600e-003**	**0.1118**	**7.6000e-004**	**0.1125**	**0.0296**	**7.1000e-004**	**0.0304**		**109.0729**	**109.0729**	**4.9500e-003**		**109.1769**

3.5 Trenching - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0596	9.6694	6.8230	8.8900e-003		0.7321	0.7321		0.6742	0.6742		897.0097	897.0097	0.2687		902.6530

Total	**1.0596**	**9.6694**	**6.8230**	**8.8900e-003**		**0.7321**	**0.7321**		**0.6742**	**0.6742**		**897.0097**	**897.0097**	**0.2687**		**902.6530**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0316	0.0407	0.5007	1.3600e-003	0.1118	7.6000e-004	0.1125	0.0296	7.1000e-004	0.0304		109.0729	109.0729	4.9500e-003		109.1769
Total	**0.0316**	**0.0407**	**0.5007**	**1.3600e-003**	**0.1118**	**7.6000e-004**	**0.1125**	**0.0296**	**7.1000e-004**	**0.0304**		**109.0729**	**109.0729**	**4.9500e-003**		**109.1769**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0596	9.6694	6.8230	8.8900e-003		0.7321	0.7321		0.6742	0.6742	0.0000	897.0097	897.0097	0.2687		902.6530
Total	**1.0596**	**9.6694**	**6.8230**	**8.8900e-003**		**0.7321**	**0.7321**		**0.6742**	**0.6742**	**0.0000**	**897.0097**	**897.0097**	**0.2687**		**902.6530**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0316	0.0407	0.5007	1.3600e-003	0.1118	7.6000e-004	0.1125	0.0296	7.1000e-004	0.0304		109.0729	109.0729	4.9500e-003		109.1769
Total	**0.0316**	**0.0407**	**0.5007**	**1.3600e-003**	**0.1118**	**7.6000e-004**	**0.1125**	**0.0296**	**7.1000e-004**	**0.0304**		**109.0729**	**109.0729**	**4.9500e-003**		**109.1769**

3.6 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2740	12.6738	8.0395	0.0113		0.8553	0.8553		0.7869	0.7869		1,159.5310	1,159.5310	0.3553		1,166.9919
Total	**1.2740**	**12.6738**	**8.0395**	**0.0113**		**0.8553**	**0.8553**		**0.7869**	**0.7869**		**1,159.5310**	**1,159.5310**	**0.3553**		**1,166.9919**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0323	0.3148	0.3846	8.6000e-004	0.0250	4.8900e-003	0.0299	7.1200e-003	4.5000e-003	0.0116		85.3317	85.3317	6.0000e-004		85.3442
Worker	0.0348	0.0448	0.5508	1.4900e-003	0.1230	8.4000e-004	0.1238	0.0326	7.8000e-004	0.0334		119.9802	119.9802	5.4500e-003		120.0946
Total	**0.0670**	**0.3596**	**0.9355**	**2.3500e-003**	**0.1480**	**5.7300e-003**	**0.1537**	**0.0397**	**5.2800e-003**	**0.0450**		**205.3119**	**205.3119**	**6.0500e-003**		**205.4388**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2740	12.6738	8.0395	0.0113		0.8553	0.8553		0.7869	0.7869	0.0000	1,159.5310	1,159.5310	0.3553		1,166.9919
Total	**1.2740**	**12.6738**	**8.0395**	**0.0113**		**0.8553**	**0.8553**		**0.7869**	**0.7869**	**0.0000**	**1,159.5310**	**1,159.5310**	**0.3553**		**1,166.9919**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0323	0.3148	0.3846	8.6000e-004	0.0250	4.8900e-003	0.0299	7.1200e-003	4.5000e-003	0.0116		85.3317	85.3317	6.0000e-004		85.3442
Worker	0.0348	0.0448	0.5508	1.4900e-003	0.1230	8.4000e-004	0.1238	0.0326	7.8000e-004	0.0334		119.9802	119.9802	5.4500e-003		120.0946
Total	**0.0670**	**0.3596**	**0.9355**	**2.3500e-003**	**0.1480**	**5.7300e-003**	**0.1537**	**0.0397**	**5.2800e-003**	**0.0450**		**205.3119**	**205.3119**	**6.0500e-003**		**205.4388**

3.6 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0786	10.9578	7.7239	0.0113		0.7055	0.7055		0.6491	0.6491		1,140.2487	1,140.2487	0.3550		1,147.7032
Total	**1.0786**	**10.9578**	**7.7239**	**0.0113**		**0.7055**	**0.7055**		**0.6491**	**0.6491**		**1,140.2487**	**1,140.2487**	**0.3550**		**1,147.7032**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0302	0.2890	0.3651	8.6000e-004	0.0250	4.6100e-003	0.0296	7.1200e-003	4.2400e-003	0.0114		83.8830	83.8830	5.9000e-004		83.8954
Worker	0.0317	0.0409	0.5045	1.4900e-003	0.1230	8.3000e-004	0.1238	0.0326	7.7000e-004	0.0334		115.4852	115.4852	5.0800e-003		115.5920
Total	**0.0619**	**0.3298**	**0.8696**	**2.3500e-003**	**0.1480**	**5.4400e-003**	**0.1534**	**0.0397**	**5.0100e-003**	**0.0447**		**199.3682**	**199.3682**	**5.6700e-003**		**199.4874**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0786	10.9578	7.7239	0.0113		0.7055	0.7055		0.6491	0.6491	0.0000	1,140.2487	1,140.2487	0.3550		1,147.7032
Total	**1.0786**	**10.9578**	**7.7239**	**0.0113**		**0.7055**	**0.7055**		**0.6491**	**0.6491**	**0.0000**	**1,140.2487**	**1,140.2487**	**0.3550**		**1,147.7032**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0302	0.2890	0.3651	8.6000e-004	0.0250	4.6100e-003	0.0296	7.1200e-003	4.2400e-003	0.0114		83.8830	83.8830	5.9000e-004		83.8954
Worker	0.0317	0.0409	0.5045	1.4900e-003	0.1230	8.3000e-004	0.1238	0.0326	7.7000e-004	0.0334		115.4852	115.4852	5.0800e-003		115.5920
Total	**0.0619**	**0.3298**	**0.8696**	**2.3500e-003**	**0.1480**	**5.4400e-003**	**0.1534**	**0.0397**	**5.0100e-003**	**0.0447**		**199.3682**	**199.3682**	**5.6700e-003**		**199.4874**

3.7 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3223	3.1705	2.9603	5.0800e-003		0.1499	0.1499		0.1397	0.1397		479.5674	479.5674	0.1336		482.3724

Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.3223**	**3.1705**	**2.9603**	**5.0800e-003**		**0.1499**	**0.1499**		**0.1397**	**0.1397**		**479.5674**	**479.5674**	**0.1336**		**482.3724**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0231	0.0297	0.3669	1.0900e-003	0.0894	6.0000e-004	0.0900	0.0237	5.6000e-004	0.0243		83.9893	83.9893	3.7000e-003		84.0669
Total	**0.0231**	**0.0297**	**0.3669**	**1.0900e-003**	**0.0894**	**6.0000e-004**	**0.0900**	**0.0237**	**5.6000e-004**	**0.0243**		**83.9893**	**83.9893**	**3.7000e-003**		**84.0669**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3223	3.1705	2.9603	5.0800e-003		0.1499	0.1499		0.1397	0.1397	0.0000	479.5674	479.5674	0.1336		482.3724
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.3223**	**3.1705**	**2.9603**	**5.0800e-003**		**0.1499**	**0.1499**		**0.1397**	**0.1397**	**0.0000**	**479.5674**	**479.5674**	**0.1336**		**482.3724**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0231	0.0297	0.3669	1.0900e-003	0.0894	6.0000e-004	0.0900	0.0237	5.6000e-004	0.0243		83.9893	83.9893	3.7000e-003		84.0669
Total	**0.0231**	**0.0297**	**0.3669**	**1.0900e-003**	**0.0894**	**6.0000e-004**	**0.0900**	**0.0237**	**5.6000e-004**	**0.0243**		**83.9893**	**83.9893**	**3.7000e-003**		**84.0669**

3.8 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	12.3818					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.0102
Total	**12.6805**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.0102**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	5.7700e-003	7.4300e-003	0.0917	2.7000e-004	0.0224	1.5000e-004	0.0225	5.9300e-003	1.4000e-004	6.0700e-003		20.9973	20.9973	9.2000e-004		21.0167
Total	**5.7700e-003**	**7.4300e-003**	**0.0917**	**2.7000e-004**	**0.0224**	**1.5000e-004**	**0.0225**	**5.9300e-003**	**1.4000e-004**	**6.0700e-003**		**20.9973**	**20.9973**	**9.2000e-004**		**21.0167**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	12.3818					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.0102
Total	**12.6805**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.0102**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	5.7700e-003	7.4300e-003	0.0917	2.7000e-004	0.0224	1.5000e-004	0.0225	5.9300e-003	1.4000e-004	6.0700e-003		20.9973	20.9973	9.2000e-004		21.0167
Total	**5.7700e-003**	**7.4300e-003**	**0.0917**	**2.7000e-004**	**0.0224**	**1.5000e-004**	**0.0225**	**5.9300e-003**	**1.4000e-004**	**6.0700e-003**		**20.9973**	**20.9973**	**9.2000e-004**		**21.0167**

Cosmetology Building

Orange County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	26.71	1000sqft	0.61	26,713.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - modified

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Demolition -

Grading - modified

Architectural Coating - modified

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblConstructionPhase	NumDays	5.00	20.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	2.00	4.00
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	PhaseEndDate	2/12/2015	8/28/2017
tblConstructionPhase	PhaseStartDate	1/16/2015	8/1/2017
tblGrading	AcresOfGrading	2.00	1.25
tblLandUse	LandUseSquareFeet	26,710.00	26,713.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2018

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Year	lb/day										lb/day					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2017	1.9604	20.7148	12.8846	0.0277	2.5831	1.0377	3.6208	0.4263	0.9792	1.4055	0.0000	2,729.1933	2,729.1933	0.4505	0.0000	2,738.6533
2018	12.6865	11.2982	8.6423	0.0136	0.1480	0.7110	0.8589	0.0397	0.6541	0.6938	0.0000	1,332.7858	1,332.7858	0.3607	0.0000	1,340.3599
Total	**14.6469**	**32.0130**	**21.5268**	**0.0412**	**2.7311**	**1.7487**	**4.4798**	**0.4661**	**1.6333**	**2.0994**	**0.0000**	**4,061.9790**	**4,061.9790**	**0.8112**	**0.0000**	**4,079.0132**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2017	1.9604	20.7148	12.8846	0.0277	2.5831	1.0377	3.6208	0.4263	0.9792	1.4055	0.0000	2,729.1933	2,729.1933	0.4505	0.0000	2,738.6533
2018	12.6865	11.2982	8.6423	0.0136	0.1480	0.7110	0.8589	0.0397	0.6541	0.6938	0.0000	1,332.7858	1,332.7858	0.3607	0.0000	1,340.3599
Total	**14.6469**	**32.0130**	**21.5268**	**0.0412**	**2.7311**	**1.7487**	**4.4798**	**0.4661**	**1.6333**	**2.0994**	**0.0000**	**4,061.9790**	**4,061.9790**	**0.8112**	**0.0000**	**4,079.0132**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description

1	Site Preparation	Site Preparation	1/15/2015	1/15/2015	5	1	
2	Demolition	Demolition	8/1/2017	8/28/2017	5	20	
3	Grading	Grading	8/29/2017	9/1/2017	5	4	
4	Trenching	Trenching	9/2/2017	9/15/2017	5	10	
5	Building Construction	Building Construction	9/16/2017	2/2/2018	5	100	
6	Paving	Paving	2/3/2018	2/16/2018	5	10	
7	Architectural Coating	Architectural Coating	2/17/2018	3/16/2018	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1.25

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 40,070; Non-Residential Outdoor: 13,357 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	0	8.00	174	0.41
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Crawler Tractors	1	8.00	208	0.43
Demolition	Rubber Tired Dozers	0	1.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Crawler Tractors	1	8.00	208	0.43
Grading	Rubber Tired Dozers	0	1.00	255	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Trenching	Plate Compactors	1	7.00	8	0.43
Trenching	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Trenching	Trenchers	1	7.00	80	0.50
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20

Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	0	7.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	0	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	10.00	0.00	211.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	11.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000

Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.2876	0.0000	2.2876	0.3464	0.0000	0.3464			0.0000			0.0000
Off-Road	1.7336	17.9126	10.0875	0.0186		0.9968	0.9968		0.9416	0.9416		1,858.5228	1,858.5228	0.4400		1,867.7628
Total	**1.7336**	**17.9126**	**10.0875**	**0.0186**	**2.2876**	**0.9968**	**3.2844**	**0.3464**	**0.9416**	**1.2880**		**1,858.5228**	**1,858.5228**	**0.4400**		**1,867.7628**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.1936	2.7574	2.3268	7.7400e-003	0.1838	0.0401	0.2239	0.0503	0.0369	0.0872		767.3734	767.3734	5.5300e-003		767.4895
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0332	0.0448	0.4703	1.2800e-003	0.1118	7.6000e-004	0.1125	0.0296	7.1000e-004	0.0304		103.2970	103.2970	4.9500e-003		103.4010
Total	**0.2268**	**2.8022**	**2.7971**	**9.0200e-003**	**0.2956**	**0.0409**	**0.3365**	**0.0800**	**0.0376**	**0.1176**		**870.6705**	**870.6705**	**0.0105**		**870.8905**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.2876	0.0000	2.2876	0.3464	0.0000	0.3464			0.0000			0.0000
Off-Road	1.7336	17.9126	10.0875	0.0186		0.9968	0.9968		0.9416	0.9416	0.0000	1,858.5228	1,858.5228	0.4400		1,867.7628
Total	**1.7336**	**17.9126**	**10.0875**	**0.0186**	**2.2876**	**0.9968**	**3.2844**	**0.3464**	**0.9416**	**1.2880**	**0.0000**	**1,858.5228**	**1,858.5228**	**0.4400**		**1,867.7628**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1936	2.7574	2.3268	7.7400e-003	0.1838	0.0401	0.2239	0.0503	0.0369	0.0872		767.3734	767.3734	5.5300e-003		767.4895
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0332	0.0448	0.4703	1.2800e-003	0.1118	7.6000e-004	0.1125	0.0296	7.1000e-004	0.0304		103.2970	103.2970	4.9500e-003		103.4010
Total	**0.2268**	**2.8022**	**2.7971**	**9.0200e-003**	**0.2956**	**0.0409**	**0.3365**	**0.0800**	**0.0376**	**0.1176**		**870.6705**	**870.6705**	**0.0105**		**870.8905**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3314	0.0000	0.3314	0.0358	0.0000	0.0358			0.0000			0.0000
Off-Road	1.7336	17.9126	10.0875	0.0186		0.9968	0.9968		0.9416	0.9416		1,858.5228	1,858.5228	0.4400		1,867.7628
Total	**1.7336**	**17.9126**	**10.0875**	**0.0186**	**0.3314**	**0.9968**	**1.3282**	**0.0358**	**0.9416**	**0.9774**		**1,858.5228**	**1,858.5228**	**0.4400**		**1,867.7628**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0332	0.0448	0.4703	1.2800e-003	0.1118	7.6000e-004	0.1125	0.0296	7.1000e-004	0.0304		103.2970	103.2970	4.9500e-003		103.4010
Total	**0.0332**	**0.0448**	**0.4703**	**1.2800e-003**	**0.1118**	**7.6000e-004**	**0.1125**	**0.0296**	**7.1000e-004**	**0.0304**		**103.2970**	**103.2970**	**4.9500e-003**		**103.4010**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3314	0.0000	0.3314	0.0358	0.0000	0.0358			0.0000			0.0000
Off-Road	1.7336	17.9126	10.0875	0.0186		0.9968	0.9968		0.9416	0.9416	0.0000	1,858.5228	1,858.5228	0.4400		1,867.7628
Total	**1.7336**	**17.9126**	**10.0875**	**0.0186**	**0.3314**	**0.9968**	**1.3282**	**0.0358**	**0.9416**	**0.9774**	**0.0000**	**1,858.5228**	**1,858.5228**	**0.4400**		**1,867.7628**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0332	0.0448	0.4703	1.2800e-003	0.1118	7.6000e-004	0.1125	0.0296	7.1000e-004	0.0304		103.2970	103.2970	4.9500e-003		103.4010
Total	**0.0332**	**0.0448**	**0.4703**	**1.2800e-003**	**0.1118**	**7.6000e-004**	**0.1125**	**0.0296**	**7.1000e-004**	**0.0304**		**103.2970**	**103.2970**	**4.9500e-003**		**103.4010**

3.5 Trenching - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0596	9.6694	6.8230	8.8900e-003		0.7321	0.7321		0.6742	0.6742		897.0097	897.0097	0.2687		902.6530

Total	**1.0596**	**9.6694**	**6.8230**	**8.8900e-003**		**0.7321**	**0.7321**		**0.6742**	**0.6742**		**897.0097**	**897.0097**	**0.2687**		**902.6530**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0332	0.0448	0.4703	1.2800e-003	0.1118	7.6000e-004	0.1125	0.0296	7.1000e-004	0.0304		103.2970	103.2970	4.9500e-003		103.4010
Total	**0.0332**	**0.0448**	**0.4703**	**1.2800e-003**	**0.1118**	**7.6000e-004**	**0.1125**	**0.0296**	**7.1000e-004**	**0.0304**		**103.2970**	**103.2970**	**4.9500e-003**		**103.4010**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0596	9.6694	6.8230	8.8900e-003		0.7321	0.7321		0.6742	0.6742	0.0000	897.0097	897.0097	0.2687		902.6530
Total	**1.0596**	**9.6694**	**6.8230**	**8.8900e-003**		**0.7321**	**0.7321**		**0.6742**	**0.6742**	**0.0000**	**897.0097**	**897.0097**	**0.2687**		**902.6530**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0332	0.0448	0.4703	1.2800e-003	0.1118	7.6000e-004	0.1125	0.0296	7.1000e-004	0.0304		103.2970	103.2970	4.9500e-003		103.4010
Total	**0.0332**	**0.0448**	**0.4703**	**1.2800e-003**	**0.1118**	**7.6000e-004**	**0.1125**	**0.0296**	**7.1000e-004**	**0.0304**		**103.2970**	**103.2970**	**4.9500e-003**		**103.4010**

3.6 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2740	12.6738	8.0395	0.0113		0.8553	0.8553		0.7869	0.7869		1,159.5310	1,159.5310	0.3553		1,166.9919
Total	**1.2740**	**12.6738**	**8.0395**	**0.0113**		**0.8553**	**0.8553**		**0.7869**	**0.7869**		**1,159.5310**	**1,159.5310**	**0.3553**		**1,166.9919**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0357	0.3220	0.4662	8.6000e-004	0.0250	4.9400e-003	0.0300	7.1200e-003	4.5500e-003	0.0117		84.6104	84.6104	6.2000e-004		84.6233
Worker	0.0365	0.0492	0.5173	1.4100e-003	0.1230	8.4000e-004	0.1238	0.0326	7.8000e-004	0.0334		113.6267	113.6267	5.4500e-003		113.7411
Total	**0.0722**	**0.3713**	**0.9835**	**2.2700e-003**	**0.1480**	**5.7800e-003**	**0.1537**	**0.0397**	**5.3300e-003**	**0.0451**		**198.2371**	**198.2371**	**6.0700e-003**		**198.3644**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2740	12.6738	8.0395	0.0113		0.8553	0.8553		0.7869	0.7869	0.0000	1,159.5310	1,159.5310	0.3553		1,166.9919
Total	**1.2740**	**12.6738**	**8.0395**	**0.0113**		**0.8553**	**0.8553**		**0.7869**	**0.7869**	**0.0000**	**1,159.5310**	**1,159.5310**	**0.3553**		**1,166.9919**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0357	0.3220	0.4662	8.6000e-004	0.0250	4.9400e-003	0.0300	7.1200e-003	4.5500e-003	0.0117		84.6104	84.6104	6.2000e-004		84.6233
Worker	0.0365	0.0492	0.5173	1.4100e-003	0.1230	8.4000e-004	0.1238	0.0326	7.8000e-004	0.0334		113.6267	113.6267	5.4500e-003		113.7411
Total	**0.0722**	**0.3713**	**0.9835**	**2.2700e-003**	**0.1480**	**5.7800e-003**	**0.1537**	**0.0397**	**5.3300e-003**	**0.0451**		**198.2371**	**198.2371**	**6.0700e-003**		**198.3644**

3.6 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0786	10.9578	7.7239	0.0113		0.7055	0.7055		0.6491	0.6491		1,140.2487	1,140.2487	0.3550		1,147.7032
Total	**1.0786**	**10.9578**	**7.7239**	**0.0113**		**0.7055**	**0.7055**		**0.6491**	**0.6491**		**1,140.2487**	**1,140.2487**	**0.3550**		**1,147.7032**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0333	0.2955	0.4461	8.6000e-004	0.0250	4.6600e-003	0.0297	7.1200e-003	4.2800e-003	0.0114		83.1722	83.1722	6.1000e-004		83.1851
Worker	0.0333	0.0449	0.4723	1.4100e-003	0.1230	8.3000e-004	0.1238	0.0326	7.7000e-004	0.0334		109.3648	109.3648	5.0800e-003		109.4716
Total	**0.0666**	**0.3404**	**0.9183**	**2.2700e-003**	**0.1480**	**5.4900e-003**	**0.1534**	**0.0397**	**5.0500e-003**	**0.0448**		**192.5370**	**192.5370**	**5.6900e-003**		**192.6567**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0786	10.9578	7.7239	0.0113		0.7055	0.7055		0.6491	0.6491	0.0000	1,140.2487	1,140.2487	0.3550		1,147.7032
Total	**1.0786**	**10.9578**	**7.7239**	**0.0113**		**0.7055**	**0.7055**		**0.6491**	**0.6491**	**0.0000**	**1,140.2487**	**1,140.2487**	**0.3550**		**1,147.7032**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0333	0.2955	0.4461	8.6000e-004	0.0250	4.6600e-003	0.0297	7.1200e-003	4.2800e-003	0.0114		83.1722	83.1722	6.1000e-004		83.1851
Worker	0.0333	0.0449	0.4723	1.4100e-003	0.1230	8.3000e-004	0.1238	0.0326	7.7000e-004	0.0334		109.3648	109.3648	5.0800e-003		109.4716
Total	**0.0666**	**0.3404**	**0.9183**	**2.2700e-003**	**0.1480**	**5.4900e-003**	**0.1534**	**0.0397**	**5.0500e-003**	**0.0448**		**192.5370**	**192.5370**	**5.6900e-003**		**192.6567**

3.7 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3223	3.1705	2.9603	5.0800e-003		0.1499	0.1499		0.1397	0.1397		479.5674	479.5674	0.1336		482.3724

Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.3223**	**3.1705**	**2.9603**	**5.0800e-003**		**0.1499**	**0.1499**		**0.1397**	**0.1397**		**479.5674**	**479.5674**	**0.1336**		**482.3724**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0242	0.0327	0.3435	1.0300e-003	0.0894	6.0000e-004	0.0900	0.0237	5.6000e-004	0.0243		79.5381	79.5381	3.7000e-003		79.6157
Total	**0.0242**	**0.0327**	**0.3435**	**1.0300e-003**	**0.0894**	**6.0000e-004**	**0.0900**	**0.0237**	**5.6000e-004**	**0.0243**		**79.5381**	**79.5381**	**3.7000e-003**		**79.6157**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3223	3.1705	2.9603	5.0800e-003		0.1499	0.1499		0.1397	0.1397	0.0000	479.5674	479.5674	0.1336		482.3724
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.3223**	**3.1705**	**2.9603**	**5.0800e-003**		**0.1499**	**0.1499**		**0.1397**	**0.1397**	**0.0000**	**479.5674**	**479.5674**	**0.1336**		**482.3724**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0242	0.0327	0.3435	1.0300e-003	0.0894	6.0000e-004	0.0900	0.0237	5.6000e-004	0.0243		79.5381	79.5381	3.7000e-003		79.6157
Total	**0.0242**	**0.0327**	**0.3435**	**1.0300e-003**	**0.0894**	**6.0000e-004**	**0.0900**	**0.0237**	**5.6000e-004**	**0.0243**		**79.5381**	**79.5381**	**3.7000e-003**		**79.6157**

3.8 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	12.3818					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.0102
Total	**12.6805**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.0102**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	6.0500e-003	8.1700e-003	0.0859	2.6000e-004	0.0224	1.5000e-004	0.0225	5.9300e-003	1.4000e-004	6.0700e-003		19.8845	19.8845	9.2000e-004		19.9039
Total	**6.0500e-003**	**8.1700e-003**	**0.0859**	**2.6000e-004**	**0.0224**	**1.5000e-004**	**0.0225**	**5.9300e-003**	**1.4000e-004**	**6.0700e-003**		**19.8845**	**19.8845**	**9.2000e-004**		**19.9039**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	12.3818					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.0102
Total	**12.6805**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.0102**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	6.0500e-003	8.1700e-003	0.0859	2.6000e-004	0.0224	1.5000e-004	0.0225	5.9300e-003	1.4000e-004	6.0700e-003		19.8845	19.8845	9.2000e-004		19.9039
Total	**6.0500e-003**	**8.1700e-003**	**0.0859**	**2.6000e-004**	**0.0224**	**1.5000e-004**	**0.0225**	**5.9300e-003**	**1.4000e-004**	**6.0700e-003**		**19.8845**	**19.8845**	**9.2000e-004**		**19.9039**

Language Arts Complex

Orange County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	67.81	1000sqft	1.56	67,807.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment -

Off-road Equipment - modified

Off-road Equipment -

Grading - modified

Demolition -

Architectural Coating - modified

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	2.00	1.00
tblConstructionPhase	PhaseEndDate	2/26/2015	2/22/2019
tblConstructionPhase	PhaseStartDate	1/30/2015	1/28/2019
tblGrading	AcresOfGrading	3.00	1.50
tblOffRoadEquipment	LoadFactor	0.43	0.43
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.50	0.50
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Trenchers
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2020

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2019	0.2679	1.9461	1.7739	3.2200e-003	0.0716	0.1061	0.1776	0.0158	0.1020	0.1177	0.0000	263.7899	263.7899	0.0431	0.0000	264.6955
2020	0.3172	0.0198	0.0239	4.0000e-005	7.5000e-004	1.2400e-003	1.9900e-003	2.0000e-004	1.2300e-003	1.4300e-003	0.0000	3.5535	3.5535	3.4000e-004	0.0000	3.5607
Total	**0.5850**	**1.9658**	**1.7978**	**3.2600e-003**	**0.0723**	**0.1073**	**0.1796**	**0.0160**	**0.1032**	**0.1192**	**0.0000**	**267.3434**	**267.3434**	**0.0435**	**0.0000**	**268.2562**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2019	0.2679	1.9461	1.7739	3.2200e-003	0.0716	0.1061	0.1776	0.0158	0.1020	0.1177	0.0000	263.7897	263.7897	0.0431	0.0000	264.6953
2020	0.3172	0.0198	0.0239	4.0000e-005	7.5000e-004	1.2400e-003	1.9900e-003	2.0000e-004	1.2300e-003	1.4300e-003	0.0000	3.5535	3.5535	3.4000e-004	0.0000	3.5607
Total	**0.5850**	**1.9658**	**1.7978**	**3.2600e-003**	**0.0723**	**0.1073**	**0.1796**	**0.0160**	**0.1032**	**0.1192**	**0.0000**	**267.3432**	**267.3432**	**0.0435**	**0.0000**	**268.2560**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/29/2015	1/29/2015	5	1	
2	Demolition	Demolition	1/28/2019	2/22/2019	5	20	
3	Grading	Grading	2/23/2019	2/28/2019	5	4	
4	Trenching	Trenching	3/1/2019	3/14/2019	5	10	
5	Building Construction	Building Construction	3/15/2019	12/19/2019	5	200	
6	Paving	Paving	12/20/2019	1/2/2020	5	10	
7	Architectural Coating	Architectural Coating	1/3/2020	1/30/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 101,711; Non-Residential Outdoor: 33,904 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	6.00	226	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Site Preparation	Graders	0	8.00	174	0.41
Paving	Pavers	0	6.00	125	0.42
Paving	Rollers	0	7.00	80	0.38

Demolition	Rubber Tired Dozers	0	8.00	255	0.40
Grading	Rubber Tired Dozers	0	6.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Graders	1	6.00	174	0.41
Paving	Paving Equipment	1	8.00	130	0.36
Site Preparation	Rubber Tired Dozers	0	7.00	255	0.40
Building Construction	Welders	3	8.00	46	0.45
Demolition	Crawler Tractors	1	8.00	208	0.43
Grading	Crawler Tractors	1	6.00	208	0.43
Trenching	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Trenching	Trenchers	1	7.00	80	0.50
Trenching	Plate Compactors	1	7.00	8	0.43

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	266.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	28.00	11.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	6.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0288	0.0000	0.0288	4.3600e-003	0.0000	4.3600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0153	0.1611	0.1084	2.0000e-004		8.3700e-003	8.3700e-003		7.8900e-003	7.8900e-003	0.0000	17.8749	17.8749	4.3300e-003	0.0000	17.9659

Total	**0.0153**	**0.1611**	**0.1084**	**2.0000e-004**	**0.0288**	**8.3700e-003**	**0.0372**	**4.3600e-003**	**7.8900e-003**	**0.0123**	**0.0000**	**17.8749**	**17.8749**	**4.3300e-003**	**0.0000**	**17.9659**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.2400e-003	0.0309	0.0268	1.0000e-004	2.2800e-003	5.0000e-004	2.7800e-003	6.3000e-004	4.6000e-004	1.0800e-003	0.0000	8.5194	8.5194	7.0000e-005	0.0000	8.5208
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	3.9000e-004	4.0900e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.8870	0.8870	4.0000e-005	0.0000	0.8878
Total	**2.5000e-003**	**0.0313**	**0.0309**	**1.1000e-004**	**3.3800e-003**	**5.1000e-004**	**3.8900e-003**	**9.2000e-004**	**4.7000e-004**	**1.3800e-003**	**0.0000**	**9.4064**	**9.4064**	**1.1000e-004**	**0.0000**	**9.4086**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0288	0.0000	0.0288	4.3600e-003	0.0000	4.3600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0153	0.1611	0.1084	2.0000e-004		8.3700e-003	8.3700e-003		7.8900e-003	7.8900e-003	0.0000	17.8748	17.8748	4.3300e-003	0.0000	17.9658
Total	**0.0153**	**0.1611**	**0.1084**	**2.0000e-004**	**0.0288**	**8.3700e-003**	**0.0372**	**4.3600e-003**	**7.8900e-003**	**0.0123**	**0.0000**	**17.8748**	**17.8748**	**4.3300e-003**	**0.0000**	**17.9658**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.2400e-003	0.0309	0.0268	1.0000e-004	2.2800e-003	5.0000e-004	2.7800e-003	6.3000e-004	4.6000e-004	1.0800e-003	0.0000	8.5194	8.5194	7.0000e-005	0.0000	8.5208
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	3.9000e-004	4.0900e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.8870	0.8870	4.0000e-005	0.0000	0.8878
Total	**2.5000e-003**	**0.0313**	**0.0309**	**1.1000e-004**	**3.3800e-003**	**5.1000e-004**	**3.8900e-003**	**9.2000e-004**	**4.7000e-004**	**1.3800e-003**	**0.0000**	**9.4064**	**9.4064**	**1.1000e-004**	**0.0000**	**9.4086**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.0000e-004	0.0000	8.0000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4500e-003	0.0272	0.0147	3.0000e-005		1.3500e-003	1.3500e-003		1.2400e-003	1.2400e-003	0.0000	2.3604	2.3604	7.5000e-004	0.0000	2.3761
Total	**2.4500e-003**	**0.0272**	**0.0147**	**3.0000e-005**	**8.0000e-004**	**1.3500e-003**	**2.1500e-003**	**9.0000e-005**	**1.2400e-003**	**1.3300e-003**	**0.0000**	**2.3604**	**2.3604**	**7.5000e-004**	**0.0000**	**2.3761**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	6.0000e-005	6.5000e-004	0.0000	1.8000e-004	0.0000	1.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1419	0.1419	1.0000e-005	0.0000	0.1421
Total	**4.0000e-005**	**6.0000e-005**	**6.5000e-004**	**0.0000**	**1.8000e-004**	**0.0000**	**1.8000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1419**	**0.1419**	**1.0000e-005**	**0.0000**	**0.1421**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.0000e-004	0.0000	8.0000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4500e-003	0.0272	0.0147	3.0000e-005		1.3500e-003	1.3500e-003		1.2400e-003	1.2400e-003	0.0000	2.3604	2.3604	7.5000e-004	0.0000	2.3761
Total	**2.4500e-003**	**0.0272**	**0.0147**	**3.0000e-005**	**8.0000e-004**	**1.3500e-003**	**2.1500e-003**	**9.0000e-005**	**1.2400e-003**	**1.3300e-003**	**0.0000**	**2.3604**	**2.3604**	**7.5000e-004**	**0.0000**	**2.3761**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	6.0000e-005	6.5000e-004	0.0000	1.8000e-004	0.0000	1.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1419	0.1419	1.0000e-005	0.0000	0.1421
Total	**4.0000e-005**	**6.0000e-005**	**6.5000e-004**	**0.0000**	**1.8000e-004**	**0.0000**	**1.8000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1419**	**0.1419**	**1.0000e-005**	**0.0000**	**0.1421**

3.5 Trenching - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.1600e-003	0.0391	0.0329	4.0000e-005		2.7400e-003	2.7400e-003		2.5200e-003	2.5200e-003	0.0000	3.9340	3.9340	1.2200e-003	0.0000	3.9595
Total	**4.1600e-003**	**0.0391**	**0.0329**	**4.0000e-005**		**2.7400e-003**	**2.7400e-003**		**2.5200e-003**	**2.5200e-003**	**0.0000**	**3.9340**	**3.9340**	**1.2200e-003**	**0.0000**	**3.9595**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-004	1.9000e-004	2.0400e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4435	0.4435	2.0000e-005	0.0000	0.4439
Total	**1.3000e-004**	**1.9000e-004**	**2.0400e-003**	**1.0000e-005**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4435**	**0.4435**	**2.0000e-005**	**0.0000**	**0.4439**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.1600e-003	0.0391	0.0329	4.0000e-005		2.7400e-003	2.7400e-003		2.5200e-003	2.5200e-003	0.0000	3.9340	3.9340	1.2200e-003	0.0000	3.9595
Total	**4.1600e-003**	**0.0391**	**0.0329**	**4.0000e-005**		**2.7400e-003**	**2.7400e-003**		**2.5200e-003**	**2.5200e-003**	**0.0000**	**3.9340**	**3.9340**	**1.2200e-003**	**0.0000**	**3.9595**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-004	1.9000e-004	2.0400e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4435	0.4435	2.0000e-005	0.0000	0.4439
Total	**1.3000e-004**	**1.9000e-004**	**2.0400e-003**	**1.0000e-005**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4435**	**0.4435**	**2.0000e-005**	**0.0000**	**0.4439**

3.6 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2264	1.5883	1.3450	2.2000e-003		0.0912	0.0912		0.0881	0.0881	0.0000	182.2307	182.2307	0.0349	0.0000	182.9642

Total	**0.2264**	**1.5883**	**1.3450**	**2.2000e-003**		**0.0912**	**0.0912**		**0.0881**	**0.0881**	**0.0000**	**182.2307**	**182.2307**	**0.0349**	**0.0000**	**182.9642**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.2600e-003	0.0768	0.1118	2.4000e-004	6.7700e-003	1.1900e-003	7.9600e-003	1.9300e-003	1.0900e-003	3.0300e-003	0.0000	20.5625	20.5625	1.5000e-004	0.0000	20.5657
Worker	7.3900e-003	0.0109	0.1145	3.7000e-004	0.0307	2.1000e-004	0.0310	8.1600e-003	2.0000e-004	8.3600e-003	0.0000	24.8355	24.8355	1.1200e-003	0.0000	24.8590
Total	**0.0157**	**0.0877**	**0.2262**	**6.1000e-004**	**0.0375**	**1.4000e-003**	**0.0389**	**0.0101**	**1.2900e-003**	**0.0114**	**0.0000**	**45.3980**	**45.3980**	**1.2700e-003**	**0.0000**	**45.4247**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2264	1.5883	1.3450	2.2000e-003		0.0912	0.0912		0.0881	0.0881	0.0000	182.2305	182.2305	0.0349	0.0000	182.9640
Total	**0.2264**	**1.5883**	**1.3450**	**2.2000e-003**		**0.0912**	**0.0912**		**0.0881**	**0.0881**	**0.0000**	**182.2305**	**182.2305**	**0.0349**	**0.0000**	**182.9640**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.2600e-003	0.0768	0.1118	2.4000e-004	6.7700e-003	1.1900e-003	7.9600e-003	1.9300e-003	1.0900e-003	3.0300e-003	0.0000	20.5625	20.5625	1.5000e-004	0.0000	20.5657
Worker	7.3900e-003	0.0109	0.1145	3.7000e-004	0.0307	2.1000e-004	0.0310	8.1600e-003	2.0000e-004	8.3600e-003	0.0000	24.8355	24.8355	1.1200e-003	0.0000	24.8590
Total	**0.0157**	**0.0877**	**0.2262**	**6.1000e-004**	**0.0375**	**1.4000e-003**	**0.0389**	**0.0101**	**1.2900e-003**	**0.0114**	**0.0000**	**45.3980**	**45.3980**	**1.2700e-003**	**0.0000**	**45.4247**

3.7 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.1900e-003	0.0111	0.0118	2.0000e-005		5.3000e-004	5.3000e-004		4.9000e-004	4.9000e-004	0.0000	1.7163	1.7163	4.8000e-004	0.0000	1.7265
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.1900e-003**	**0.0111**	**0.0118**	**2.0000e-005**		**5.3000e-004**	**5.3000e-004**		**4.9000e-004**	**4.9000e-004**	**0.0000**	**1.7163**	**1.7163**	**4.8000e-004**	**0.0000**	**1.7265**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.0000e-005	1.2000e-004	1.3100e-003	0.0000	3.5000e-004	0.0000	3.5000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.2838	0.2838	1.0000e-005	0.0000	0.2841
Total	**8.0000e-005**	**1.2000e-004**	**1.3100e-003**	**0.0000**	**3.5000e-004**	**0.0000**	**3.5000e-004**	**9.0000e-005**	**0.0000**	**1.0000e-004**	**0.0000**	**0.2838**	**0.2838**	**1.0000e-005**	**0.0000**	**0.2841**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.1900e-003	0.0111	0.0118	2.0000e-005		5.3000e-004	5.3000e-004		4.9000e-004	4.9000e-004	0.0000	1.7163	1.7163	4.8000e-004	0.0000	1.7265
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.1900e-003**	**0.0111**	**0.0118**	**2.0000e-005**		**5.3000e-004**	**5.3000e-004**		**4.9000e-004**	**4.9000e-004**	**0.0000**	**1.7163**	**1.7163**	**4.8000e-004**	**0.0000**	**1.7265**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.0000e-005	1.2000e-004	1.3100e-003	0.0000	3.5000e-004	0.0000	3.5000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.2838	0.2838	1.0000e-005	0.0000	0.2841
Total	**8.0000e-005**	**1.2000e-004**	**1.3100e-003**	**0.0000**	**3.5000e-004**	**0.0000**	**3.5000e-004**	**9.0000e-005**	**0.0000**	**1.0000e-004**	**0.0000**	**0.2838**	**0.2838**	**1.0000e-005**	**0.0000**	**0.2841**

3.7 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.9000e-004	2.6600e-003	2.9600e-003	1.0000e-005		1.3000e-004	1.3000e-004		1.2000e-004	1.2000e-004	0.0000	0.4212	0.4212	1.2000e-004	0.0000	0.4238
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.9000e-004**	**2.6600e-003**	**2.9600e-003**	**1.0000e-005**		**1.3000e-004**	**1.3000e-004**		**1.2000e-004**	**1.2000e-004**	**0.0000**	**0.4212**	**0.4212**	**1.2000e-004**	**0.0000**	**0.4238**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	3.0000e-005	3.1000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0681	0.0681	0.0000	0.0000	0.0682
Total	**2.0000e-005**	**3.0000e-005**	**3.1000e-004**	**0.0000**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0681**	**0.0681**	**0.0000**	**0.0000**	**0.0682**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.9000e-004	2.6600e-003	2.9600e-003	1.0000e-005		1.3000e-004	1.3000e-004		1.2000e-004	1.2000e-004	0.0000	0.4212	0.4212	1.2000e-004	0.0000	0.4238
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.9000e-004**	**2.6600e-003**	**2.9600e-003**	**1.0000e-005**		**1.3000e-004**	**1.3000e-004**		**1.2000e-004**	**1.2000e-004**	**0.0000**	**0.4212**	**0.4212**	**1.2000e-004**	**0.0000**	**0.4238**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	3.0000e-005	3.1000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0681	0.0681	0.0000	0.0000	0.0682
Total	**2.0000e-005**	**3.0000e-005**	**3.1000e-004**	**0.0000**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0681**	**0.0681**	**0.0000**	**0.0000**	**0.0682**

3.8 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3143					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Off-Road	2.4200e-003	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5574
Total	**0.3167**	**0.0168**	**0.0183**	**3.0000e-005**		**1.1100e-003**	**1.1100e-003**		**1.1100e-003**	**1.1100e-003**	**0.0000**	**2.5533**	**2.5533**	**2.0000e-004**	**0.0000**	**2.5574**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	2.2000e-004	2.3000e-003	1.0000e-005	6.6000e-004	0.0000	6.6000e-004	1.7000e-004	0.0000	1.8000e-004	0.0000	0.5109	0.5109	2.0000e-005	0.0000	0.5114
Total	**1.5000e-004**	**2.2000e-004**	**2.3000e-003**	**1.0000e-005**	**6.6000e-004**	**0.0000**	**6.6000e-004**	**1.7000e-004**	**0.0000**	**1.8000e-004**	**0.0000**	**0.5109**	**0.5109**	**2.0000e-005**	**0.0000**	**0.5114**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3143					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4200e-003	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5574
Total	**0.3167**	**0.0168**	**0.0183**	**3.0000e-005**		**1.1100e-003**	**1.1100e-003**		**1.1100e-003**	**1.1100e-003**	**0.0000**	**2.5533**	**2.5533**	**2.0000e-004**	**0.0000**	**2.5574**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	2.2000e-004	2.3000e-003	1.0000e-005	6.6000e-004	0.0000	6.6000e-004	1.7000e-004	0.0000	1.8000e-004	0.0000	0.5109	0.5109	2.0000e-005	0.0000	0.5114
Total	**1.5000e-004**	**2.2000e-004**	**2.3000e-003**	**1.0000e-005**	**6.6000e-004**	**0.0000**	**6.6000e-004**	**1.7000e-004**	**0.0000**	**1.8000e-004**	**0.0000**	**0.5109**	**0.5109**	**2.0000e-005**	**0.0000**	**0.5114**

Language Arts Complex

Orange County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	67.81	1000sqft	1.56	67,807.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment -

Off-road Equipment - modified

Off-road Equipment -

Grading - modified

Demolition -

Architectural Coating - modified

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	2.00	1.00
tblConstructionPhase	PhaseEndDate	2/26/2015	2/22/2019
tblConstructionPhase	PhaseStartDate	1/30/2015	1/28/2019
tblGrading	AcresOfGrading	3.00	1.50
tblOffRoadEquipment	LoadFactor	0.43	0.43
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.50	0.50
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Trenchers
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2020

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2019	2.4174	19.0773	15.5994	0.0313	3.2245	0.9257	4.1120	0.5293	0.8936	1.3642	0.0000	3,012.1301	3,012.1301	0.4892	0.0000	3,022.4022
2020	31.6864	2.6869	3.2803	6.1700e-003	0.0894	0.1276	0.2170	0.0237	0.1191	0.1428	0.0000	542.4434	542.4434	0.1369	0.0000	545.3182
Total	**34.1038**	**21.7642**	**18.8797**	**0.0375**	**3.3139**	**1.0532**	**4.3290**	**0.5530**	**1.0127**	**1.5070**	**0.0000**	**3,554.5735**	**3,554.5735**	**0.6260**	**0.0000**	**3,567.7203**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2019	2.4174	19.0773	15.5994	0.0313	3.2245	0.9257	4.1120	0.5293	0.8936	1.3642	0.0000	3,012.1301	3,012.1301	0.4892	0.0000	3,022.4022
2020	31.6864	2.6869	3.2803	6.1700e-003	0.0894	0.1276	0.2170	0.0237	0.1191	0.1428	0.0000	542.4434	542.4434	0.1369	0.0000	545.3182
Total	**34.1038**	**21.7642**	**18.8797**	**0.0375**	**3.3139**	**1.0532**	**4.3290**	**0.5530**	**1.0127**	**1.5070**	**0.0000**	**3,554.5735**	**3,554.5735**	**0.6260**	**0.0000**	**3,567.7203**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/29/2015	1/29/2015	5	1	
2	Demolition	Demolition	1/28/2019	2/22/2019	5	20	
3	Grading	Grading	2/23/2019	2/28/2019	5	4	
4	Trenching	Trenching	3/1/2019	3/14/2019	5	10	
5	Building Construction	Building Construction	3/15/2019	12/19/2019	5	200	
6	Paving	Paving	12/20/2019	1/2/2020	5	10	
7	Architectural Coating	Architectural Coating	1/3/2020	1/30/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 101,711; Non-Residential Outdoor: 33,904 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	6.00	226	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Site Preparation	Graders	0	8.00	174	0.41
Paving	Pavers	0	6.00	125	0.42
Paving	Rollers	0	7.00	80	0.38

Demolition	Rubber Tired Dozers	0	8.00	255	0.40
Grading	Rubber Tired Dozers	0	6.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Graders	1	6.00	174	0.41
Paving	Paving Equipment	1	8.00	130	0.36
Site Preparation	Rubber Tired Dozers	0	7.00	255	0.40
Building Construction	Welders	3	8.00	46	0.45
Demolition	Crawler Tractors	1	8.00	208	0.43
Grading	Crawler Tractors	1	6.00	208	0.43
Trenching	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Trenching	Trenchers	1	7.00	80	0.50
Trenching	Plate Compactors	1	7.00	8	0.43

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	266.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	28.00	11.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	6.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.8809	0.0000	2.8809	0.4362	0.0000	0.4362			0.0000			0.0000
Off-Road	1.5264	16.1065	10.8385	0.0202		0.8373	0.8373		0.7887	0.7887		1,970.3666	1,970.3666	0.4776		1,980.3964

Total	**1.5264**	**16.1065**	**10.8385**	**0.0202**	**2.8809**	**0.8373**	**3.7182**	**0.4362**	**0.7887**	**1.2249**		**1,970.3666**	**1,970.3666**	**0.4776**		**1,980.3964**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2162	2.9364	2.3770	9.7800e-003	0.2318	0.0495	0.2813	0.0635	0.0456	0.1090		940.0447	940.0447	7.1300e-003		940.1944
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0270	0.0344	0.4281	1.3600e-003	0.1118	7.6000e-004	0.1125	0.0296	7.1000e-004	0.0304		101.7188	101.7188	4.4100e-003		101.8114
Total	**0.2432**	**2.9708**	**2.8051**	**0.0111**	**0.3436**	**0.0503**	**0.3938**	**0.0931**	**0.0463**	**0.1394**		**1,041.7635**	**1,041.7635**	**0.0115**		**1,042.0058**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.8809	0.0000	2.8809	0.4362	0.0000	0.4362			0.0000			0.0000
Off-Road	1.5264	16.1065	10.8385	0.0202		0.8373	0.8373		0.7887	0.7887	0.0000	1,970.3666	1,970.3666	0.4776		1,980.3963
Total	**1.5264**	**16.1065**	**10.8385**	**0.0202**	**2.8809**	**0.8373**	**3.7182**	**0.4362**	**0.7887**	**1.2249**	**0.0000**	**1,970.3666**	**1,970.3666**	**0.4776**		**1,980.3963**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2162	2.9364	2.3770	9.7800e-003	0.2318	0.0495	0.2813	0.0635	0.0456	0.1090		940.0447	940.0447	7.1300e-003		940.1944
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0270	0.0344	0.4281	1.3600e-003	0.1118	7.6000e-004	0.1125	0.0296	7.1000e-004	0.0304		101.7188	101.7188	4.4100e-003		101.8114
Total	**0.2432**	**2.9708**	**2.8051**	**0.0111**	**0.3436**	**0.0503**	**0.3938**	**0.0931**	**0.0463**	**0.1394**		**1,041.7635**	**1,041.7635**	**0.0115**		**1,042.0058**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3977	0.0000	0.3977	0.0429	0.0000	0.0429			0.0000			0.0000
Off-Road	1.2261	13.5860	7.3577	0.0131		0.6753	0.6753		0.6213	0.6213		1,300.9584	1,300.9584	0.4116		1,309.6022
Total	**1.2261**	**13.5860**	**7.3577**	**0.0131**	**0.3977**	**0.6753**	**1.0730**	**0.0429**	**0.6213**	**0.6642**		**1,300.9584**	**1,300.9584**	**0.4116**		**1,309.6022**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0216	0.0275	0.3425	1.0900e-003	0.0894	6.1000e-004	0.0900	0.0237	5.6000e-004	0.0243		81.3750	81.3750	3.5300e-003		81.4491
Total	**0.0216**	**0.0275**	**0.3425**	**1.0900e-003**	**0.0894**	**6.1000e-004**	**0.0900**	**0.0237**	**5.6000e-004**	**0.0243**		**81.3750**	**81.3750**	**3.5300e-003**		**81.4491**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3977	0.0000	0.3977	0.0429	0.0000	0.0429			0.0000			0.0000
Off-Road	1.2261	13.5860	7.3577	0.0131		0.6753	0.6753		0.6213	0.6213	0.0000	1,300.9584	1,300.9584	0.4116		1,309.6022
Total	**1.2261**	**13.5860**	**7.3577**	**0.0131**	**0.3977**	**0.6753**	**1.0730**	**0.0429**	**0.6213**	**0.6642**	**0.0000**	**1,300.9584**	**1,300.9584**	**0.4116**		**1,309.6022**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0216	0.0275	0.3425	1.0900e-003	0.0894	6.1000e-004	0.0900	0.0237	5.6000e-004	0.0243		81.3750	81.3750	3.5300e-003		81.4491
Total	**0.0216**	**0.0275**	**0.3425**	**1.0900e-003**	**0.0894**	**6.1000e-004**	**0.0900**	**0.0237**	**5.6000e-004**	**0.0243**		**81.3750**	**81.3750**	**3.5300e-003**		**81.4491**

3.5 Trenching - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8326	7.8268	6.5778	8.8700e-003		0.5476	0.5476		0.5045	0.5045		867.2961	867.2961	0.2680		872.9239
Total	**0.8326**	**7.8268**	**6.5778**	**8.8700e-003**		**0.5476**	**0.5476**		**0.5045**	**0.5045**		**867.2961**	**867.2961**	**0.2680**		**872.9239**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0270	0.0344	0.4281	1.3600e-003	0.1118	7.6000e-004	0.1125	0.0296	7.1000e-004	0.0304		101.7188	101.7188	4.4100e-003		101.8114
Total	**0.0270**	**0.0344**	**0.4281**	**1.3600e-003**	**0.1118**	**7.6000e-004**	**0.1125**	**0.0296**	**7.1000e-004**	**0.0304**		**101.7188**	**101.7188**	**4.4100e-003**		**101.8114**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8326	7.8268	6.5778	8.8700e-003		0.5476	0.5476		0.5045	0.5045	0.0000	867.2961	867.2961	0.2680		872.9239
Total	**0.8326**	**7.8268**	**6.5778**	**8.8700e-003**		**0.5476**	**0.5476**		**0.5045**	**0.5045**	**0.0000**	**867.2961**	**867.2961**	**0.2680**		**872.9239**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0270	0.0344	0.4281	1.3600e-003	0.1118	7.6000e-004	0.1125	0.0296	7.1000e-004	0.0304		101.7188	101.7188	4.4100e-003		101.8114
Total	**0.0270**	**0.0344**	**0.4281**	**1.3600e-003**	**0.1118**	**7.6000e-004**	**0.1125**	**0.0296**	**7.1000e-004**	**0.0304**		**101.7188**	**101.7188**	**4.4100e-003**		**101.8114**

3.6 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2639	15.8827	13.4498	0.0220		0.9117	0.9117		0.8808	0.8808		2,008.7495	2,008.7495	0.3850		2,016.8347

Total	**2.2639**	**15.8827**	**13.4498**	**0.0220**		**0.9117**	**0.9117**		**0.8808**	**0.8808**		**2,008.7495**	**2,008.7495**	**0.3850**		**2,016.8347**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0779	0.7371	0.9509	2.3800e-003	0.0688	0.0118	0.0806	0.0196	0.0109	0.0305		227.4713	227.4713	1.6400e-003		227.5058
Worker	0.0755	0.0964	1.1988	3.8200e-003	0.3130	2.1300e-003	0.3151	0.0830	1.9800e-003	0.0850		284.8126	284.8126	0.0124		285.0720
Total	**0.1535**	**0.8334**	**2.1496**	**6.2000e-003**	**0.3817**	**0.0140**	**0.3957**	**0.1026**	**0.0129**	**0.1155**		**512.2839**	**512.2839**	**0.0140**		**512.5777**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2639	15.8827	13.4498	0.0220		0.9117	0.9117		0.8808	0.8808	0.0000	2,008.7495	2,008.7495	0.3850		2,016.8347
Total	**2.2639**	**15.8827**	**13.4498**	**0.0220**		**0.9117**	**0.9117**		**0.8808**	**0.8808**	**0.0000**	**2,008.7495**	**2,008.7495**	**0.3850**		**2,016.8347**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0779	0.7371	0.9509	2.3800e-003	0.0688	0.0118	0.0806	0.0196	0.0109	0.0305		227.4713	227.4713	1.6400e-003		227.5058
Worker	0.0755	0.0964	1.1988	3.8200e-003	0.3130	2.1300e-003	0.3151	0.0830	1.9800e-003	0.0850		284.8126	284.8126	0.0124		285.0720
Total	**0.1535**	**0.8334**	**2.1496**	**6.2000e-003**	**0.3817**	**0.0140**	**0.3957**	**0.1026**	**0.0129**	**0.1155**		**512.2839**	**512.2839**	**0.0140**		**512.5777**

3.7 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2979	2.7746	2.9478	5.0800e-003		0.1319	0.1319		0.1230	0.1230		472.9829	472.9829	0.1335		475.7872
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2979**	**2.7746**	**2.9478**	**5.0800e-003**		**0.1319**	**0.1319**		**0.1230**	**0.1230**		**472.9829**	**472.9829**	**0.1335**		**475.7872**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0216	0.0275	0.3425	1.0900e-003	0.0894	6.1000e-004	0.0900	0.0237	5.6000e-004	0.0243		81.3750	81.3750	3.5300e-003		81.4491
Total	**0.0216**	**0.0275**	**0.3425**	**1.0900e-003**	**0.0894**	**6.1000e-004**	**0.0900**	**0.0237**	**5.6000e-004**	**0.0243**		**81.3750**	**81.3750**	**3.5300e-003**		**81.4491**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2979	2.7746	2.9478	5.0800e-003		0.1319	0.1319		0.1230	0.1230	0.0000	472.9829	472.9829	0.1335		475.7872
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2979**	**2.7746**	**2.9478**	**5.0800e-003**		**0.1319**	**0.1319**		**0.1230**	**0.1230**	**0.0000**	**472.9829**	**472.9829**	**0.1335**		**475.7872**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0216	0.0275	0.3425	1.0900e-003	0.0894	6.1000e-004	0.0900	0.0237	5.6000e-004	0.0243		81.3750	81.3750	3.5300e-003		81.4491
Total	**0.0216**	**0.0275**	**0.3425**	**1.0900e-003**	**0.0894**	**6.1000e-004**	**0.0900**	**0.0237**	**5.6000e-004**	**0.0243**		**81.3750**	**81.3750**	**3.5300e-003**		**81.4491**

3.7 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2925	2.6612	2.9587	5.0800e-003		0.1270	0.1270		0.1185	0.1185		464.3250	464.3250	0.1335		467.1291
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2925**	**2.6612**	**2.9587**	**5.0800e-003**		**0.1270**	**0.1270**		**0.1185**	**0.1185**		**464.3250**	**464.3250**	**0.1335**		**467.1291**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0204	0.0257	0.3216	1.0900e-003	0.0894	6.1000e-004	0.0900	0.0237	5.7000e-004	0.0243		78.1184	78.1184	3.3600e-003		78.1890
Total	**0.0204**	**0.0257**	**0.3216**	**1.0900e-003**	**0.0894**	**6.1000e-004**	**0.0900**	**0.0237**	**5.7000e-004**	**0.0243**		**78.1184**	**78.1184**	**3.3600e-003**		**78.1890**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2925	2.6612	2.9587	5.0800e-003		0.1270	0.1270		0.1185	0.1185	0.0000	464.3250	464.3250	0.1335		467.1291
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2925**	**2.6612**	**2.9587**	**5.0800e-003**		**0.1270**	**0.1270**		**0.1185**	**0.1185**	**0.0000**	**464.3250**	**464.3250**	**0.1335**		**467.1291**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0204	0.0257	0.3216	1.0900e-003	0.0894	6.1000e-004	0.0900	0.0237	5.7000e-004	0.0243		78.1184	78.1184	3.3600e-003		78.1890
Total	**0.0204**	**0.0257**	**0.3216**	**1.0900e-003**	**0.0894**	**6.1000e-004**	**0.0900**	**0.0237**	**5.7000e-004**	**0.0243**		**78.1184**	**78.1184**	**3.3600e-003**		**78.1890**

3.8 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	31.4289					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9057
Total	**31.6711**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**		**281.4481**	**281.4481**	**0.0218**		**281.9057**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0153	0.0193	0.2412	8.2000e-004	0.0671	4.6000e-004	0.0675	0.0178	4.3000e-004	0.0182		58.5888	58.5888	2.5200e-003		58.6418
Total	**0.0153**	**0.0193**	**0.2412**	**8.2000e-004**	**0.0671**	**4.6000e-004**	**0.0675**	**0.0178**	**4.3000e-004**	**0.0182**		**58.5888**	**58.5888**	**2.5200e-003**		**58.6418**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	31.4289					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9057
Total	**31.6711**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**	**0.0000**	**281.4481**	**281.4481**	**0.0218**		**281.9057**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0153	0.0193	0.2412	8.2000e-004	0.0671	4.6000e-004	0.0675	0.0178	4.3000e-004	0.0182		58.5888	58.5888	2.5200e-003		58.6418
Total	**0.0153**	**0.0193**	**0.2412**	**8.2000e-004**	**0.0671**	**4.6000e-004**	**0.0675**	**0.0178**	**4.3000e-004**	**0.0182**		**58.5888**	**58.5888**	**2.5200e-003**		**58.6418**

Language Arts Complex

Orange County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	67.81	1000sqft	1.56	67,807.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment -

Off-road Equipment - modified

Off-road Equipment -

Grading - modified

Demolition -

Architectural Coating - modified

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	2.00	1.00
tblConstructionPhase	PhaseEndDate	2/26/2015	2/22/2019
tblConstructionPhase	PhaseStartDate	1/30/2015	1/28/2019
tblGrading	AcresOfGrading	3.00	1.50
tblOffRoadEquipment	LoadFactor	0.43	0.43
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.50	0.50
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Trenchers
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2020

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2019	2.4284	19.1808	15.7413	0.0312	3.2245	0.9258	4.1121	0.5293	0.8937	1.3643	0.0000	3,004.4884	3,004.4884	0.4893	0.0000	3,014.7626
2020	31.6871	2.6895	3.2585	6.1100e-003	0.0894	0.1276	0.2170	0.0237	0.1191	0.1428	0.0000	538.2920	538.2920	0.1369	0.0000	541.1668
Total	**34.1155**	**21.8702**	**18.9998**	**0.0373**	**3.3139**	**1.0533**	**4.3291**	**0.5530**	**1.0128**	**1.5071**	**0.0000**	**3,542.7804**	**3,542.7804**	**0.6261**	**0.0000**	**3,555.9294**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2019	2.4284	19.1808	15.7413	0.0312	3.2245	0.9258	4.1121	0.5293	0.8937	1.3643	0.0000	3,004.4884	3,004.4884	0.4893	0.0000	3,014.7626
2020	31.6871	2.6895	3.2585	6.1100e-003	0.0894	0.1276	0.2170	0.0237	0.1191	0.1428	0.0000	538.2920	538.2920	0.1369	0.0000	541.1668
Total	**34.1155**	**21.8702**	**18.9998**	**0.0373**	**3.3139**	**1.0533**	**4.3291**	**0.5530**	**1.0128**	**1.5071**	**0.0000**	**3,542.7804**	**3,542.7804**	**0.6261**	**0.0000**	**3,555.9294**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/29/2015	1/29/2015	5	1	
2	Demolition	Demolition	1/28/2019	2/22/2019	5	20	
3	Grading	Grading	2/23/2019	2/28/2019	5	4	
4	Trenching	Trenching	3/1/2019	3/14/2019	5	10	
5	Building Construction	Building Construction	3/15/2019	12/19/2019	5	200	
6	Paving	Paving	12/20/2019	1/2/2020	5	10	
7	Architectural Coating	Architectural Coating	1/3/2020	1/30/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 101,711; Non-Residential Outdoor: 33,904 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	6.00	226	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Site Preparation	Graders	0	8.00	174	0.41
Paving	Pavers	0	6.00	125	0.42
Paving	Rollers	0	7.00	80	0.38

Demolition	Rubber Tired Dozers	0	8.00	255	0.40
Grading	Rubber Tired Dozers	0	6.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Graders	1	6.00	174	0.41
Paving	Paving Equipment	1	8.00	130	0.36
Site Preparation	Rubber Tired Dozers	0	7.00	255	0.40
Building Construction	Welders	3	8.00	46	0.45
Demolition	Crawler Tractors	1	8.00	208	0.43
Grading	Crawler Tractors	1	6.00	208	0.43
Trenching	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Trenching	Trenchers	1	7.00	80	0.50
Trenching	Plate Compactors	1	7.00	8	0.43

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	266.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	28.00	11.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	6.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.8809	0.0000	2.8809	0.4362	0.0000	0.4362			0.0000			0.0000
Off-Road	1.5264	16.1065	10.8385	0.0202		0.8373	0.8373		0.7887	0.7887		1,970.3666	1,970.3666	0.4776		1,980.3964

Total	**1.5264**	**16.1065**	**10.8385**	**0.0202**	**2.8809**	**0.8373**	**3.7182**	**0.4362**	**0.7887**	**1.2249**		**1,970.3666**	**1,970.3666**	**0.4776**		**1,980.3964**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2276	3.0364	2.7750	9.7600e-003	0.2318	0.0496	0.2814	0.0635	0.0457	0.1091		937.8052	937.8052	7.2300e-003		937.9571
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0283	0.0379	0.3998	1.2900e-003	0.1118	7.6000e-004	0.1125	0.0296	7.1000e-004	0.0304		96.3166	96.3166	4.4100e-003		96.4092
Total	**0.2559**	**3.0743**	**3.1748**	**0.0111**	**0.3436**	**0.0504**	**0.3940**	**0.0931**	**0.0464**	**0.1395**		**1,034.1218**	**1,034.1218**	**0.0116**		**1,034.3663**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.8809	0.0000	2.8809	0.4362	0.0000	0.4362			0.0000			0.0000
Off-Road	1.5264	16.1065	10.8385	0.0202		0.8373	0.8373		0.7887	0.7887	0.0000	1,970.3666	1,970.3666	0.4776		1,980.3963
Total	**1.5264**	**16.1065**	**10.8385**	**0.0202**	**2.8809**	**0.8373**	**3.7182**	**0.4362**	**0.7887**	**1.2249**	**0.0000**	**1,970.3666**	**1,970.3666**	**0.4776**		**1,980.3963**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2276	3.0364	2.7750	9.7600e-003	0.2318	0.0496	0.2814	0.0635	0.0457	0.1091		937.8052	937.8052	7.2300e-003		937.9571
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0283	0.0379	0.3998	1.2900e-003	0.1118	7.6000e-004	0.1125	0.0296	7.1000e-004	0.0304		96.3166	96.3166	4.4100e-003		96.4092
Total	**0.2559**	**3.0743**	**3.1748**	**0.0111**	**0.3436**	**0.0504**	**0.3940**	**0.0931**	**0.0464**	**0.1395**		**1,034.1218**	**1,034.1218**	**0.0116**		**1,034.3663**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3977	0.0000	0.3977	0.0429	0.0000	0.0429			0.0000			0.0000
Off-Road	1.2261	13.5860	7.3577	0.0131		0.6753	0.6753		0.6213	0.6213		1,300.9584	1,300.9584	0.4116		1,309.6022
Total	**1.2261**	**13.5860**	**7.3577**	**0.0131**	**0.3977**	**0.6753**	**1.0730**	**0.0429**	**0.6213**	**0.6642**		**1,300.9584**	**1,300.9584**	**0.4116**		**1,309.6022**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0226	0.0303	0.3198	1.0300e-003	0.0894	6.1000e-004	0.0900	0.0237	5.6000e-004	0.0243		77.0533	77.0533	3.5300e-003		77.1274
Total	**0.0226**	**0.0303**	**0.3198**	**1.0300e-003**	**0.0894**	**6.1000e-004**	**0.0900**	**0.0237**	**5.6000e-004**	**0.0243**		**77.0533**	**77.0533**	**3.5300e-003**		**77.1274**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3977	0.0000	0.3977	0.0429	0.0000	0.0429			0.0000			0.0000
Off-Road	1.2261	13.5860	7.3577	0.0131		0.6753	0.6753		0.6213	0.6213	0.0000	1,300.9584	1,300.9584	0.4116		1,309.6022
Total	**1.2261**	**13.5860**	**7.3577**	**0.0131**	**0.3977**	**0.6753**	**1.0730**	**0.0429**	**0.6213**	**0.6642**	**0.0000**	**1,300.9584**	**1,300.9584**	**0.4116**		**1,309.6022**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0226	0.0303	0.3198	1.0300e-003	0.0894	6.1000e-004	0.0900	0.0237	5.6000e-004	0.0243		77.0533	77.0533	3.5300e-003		77.1274
Total	**0.0226**	**0.0303**	**0.3198**	**1.0300e-003**	**0.0894**	**6.1000e-004**	**0.0900**	**0.0237**	**5.6000e-004**	**0.0243**		**77.0533**	**77.0533**	**3.5300e-003**		**77.1274**

3.5 Trenching - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8326	7.8268	6.5778	8.8700e-003		0.5476	0.5476		0.5045	0.5045		867.2961	867.2961	0.2680		872.9239
Total	**0.8326**	**7.8268**	**6.5778**	**8.8700e-003**		**0.5476**	**0.5476**		**0.5045**	**0.5045**		**867.2961**	**867.2961**	**0.2680**		**872.9239**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0283	0.0379	0.3998	1.2900e-003	0.1118	7.6000e-004	0.1125	0.0296	7.1000e-004	0.0304		96.3166	96.3166	4.4100e-003		96.4092
Total	**0.0283**	**0.0379**	**0.3998**	**1.2900e-003**	**0.1118**	**7.6000e-004**	**0.1125**	**0.0296**	**7.1000e-004**	**0.0304**		**96.3166**	**96.3166**	**4.4100e-003**		**96.4092**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8326	7.8268	6.5778	8.8700e-003		0.5476	0.5476		0.5045	0.5045	0.0000	867.2961	867.2961	0.2680		872.9239
Total	**0.8326**	**7.8268**	**6.5778**	**8.8700e-003**		**0.5476**	**0.5476**		**0.5045**	**0.5045**	**0.0000**	**867.2961**	**867.2961**	**0.2680**		**872.9239**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0283	0.0379	0.3998	1.2900e-003	0.1118	7.6000e-004	0.1125	0.0296	7.1000e-004	0.0304		96.3166	96.3166	4.4100e-003		96.4092
Total	**0.0283**	**0.0379**	**0.3998**	**1.2900e-003**	**0.1118**	**7.6000e-004**	**0.1125**	**0.0296**	**7.1000e-004**	**0.0304**		**96.3166**	**96.3166**	**4.4100e-003**		**96.4092**

3.6 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2639	15.8827	13.4498	0.0220		0.9117	0.9117		0.8808	0.8808		2,008.7495	2,008.7495	0.3850		2,016.8347

Total	**2.2639**	**15.8827**	**13.4498**	**0.0220**		**0.9117**	**0.9117**		**0.8808**	**0.8808**		**2,008.7495**	**2,008.7495**	**0.3850**		**2,016.8347**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0853	0.7533	1.1722	2.3600e-003	0.0688	0.0119	0.0807	0.0196	0.0110	0.0306		225.5460	225.5460	1.7000e-003		225.5817
Worker	0.0792	0.1060	1.1193	3.6100e-003	0.3130	2.1300e-003	0.3151	0.0830	1.9800e-003	0.0850		269.6864	269.6864	0.0124		269.9458
Total	**0.1645**	**0.8592**	**2.2915**	**5.9700e-003**	**0.3817**	**0.0141**	**0.3958**	**0.1026**	**0.0130**	**0.1156**		**495.2324**	**495.2324**	**0.0141**		**495.5274**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2639	15.8827	13.4498	0.0220		0.9117	0.9117		0.8808	0.8808	0.0000	2,008.7495	2,008.7495	0.3850		2,016.8347
Total	**2.2639**	**15.8827**	**13.4498**	**0.0220**		**0.9117**	**0.9117**		**0.8808**	**0.8808**	**0.0000**	**2,008.7495**	**2,008.7495**	**0.3850**		**2,016.8347**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0853	0.7533	1.1722	2.3600e-003	0.0688	0.0119	0.0807	0.0196	0.0110	0.0306		225.5460	225.5460	1.7000e-003		225.5817
Worker	0.0792	0.1060	1.1193	3.6100e-003	0.3130	2.1300e-003	0.3151	0.0830	1.9800e-003	0.0850		269.6864	269.6864	0.0124		269.9458
Total	**0.1645**	**0.8592**	**2.2915**	**5.9700e-003**	**0.3817**	**0.0141**	**0.3958**	**0.1026**	**0.0130**	**0.1156**		**495.2324**	**495.2324**	**0.0141**		**495.5274**

3.7 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2979	2.7746	2.9478	5.0800e-003		0.1319	0.1319		0.1230	0.1230		472.9829	472.9829	0.1335		475.7872
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2979**	**2.7746**	**2.9478**	**5.0800e-003**		**0.1319**	**0.1319**		**0.1230**	**0.1230**		**472.9829**	**472.9829**	**0.1335**		**475.7872**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0226	0.0303	0.3198	1.0300e-003	0.0894	6.1000e-004	0.0900	0.0237	5.6000e-004	0.0243		77.0533	77.0533	3.5300e-003		77.1274
Total	**0.0226**	**0.0303**	**0.3198**	**1.0300e-003**	**0.0894**	**6.1000e-004**	**0.0900**	**0.0237**	**5.6000e-004**	**0.0243**		**77.0533**	**77.0533**	**3.5300e-003**		**77.1274**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2979	2.7746	2.9478	5.0800e-003		0.1319	0.1319		0.1230	0.1230	0.0000	472.9829	472.9829	0.1335		475.7872
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2979**	**2.7746**	**2.9478**	**5.0800e-003**		**0.1319**	**0.1319**		**0.1230**	**0.1230**	**0.0000**	**472.9829**	**472.9829**	**0.1335**		**475.7872**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0226	0.0303	0.3198	1.0300e-003	0.0894	6.1000e-004	0.0900	0.0237	5.6000e-004	0.0243		77.0533	77.0533	3.5300e-003		77.1274
Total	**0.0226**	**0.0303**	**0.3198**	**1.0300e-003**	**0.0894**	**6.1000e-004**	**0.0900**	**0.0237**	**5.6000e-004**	**0.0243**		**77.0533**	**77.0533**	**3.5300e-003**		**77.1274**

3.7 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2925	2.6612	2.9587	5.0800e-003		0.1270	0.1270		0.1185	0.1185		464.3250	464.3250	0.1335		467.1291
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2925**	**2.6612**	**2.9587**	**5.0800e-003**		**0.1270**	**0.1270**		**0.1185**	**0.1185**		**464.3250**	**464.3250**	**0.1335**		**467.1291**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0214	0.0283	0.2999	1.0300e-003	0.0894	6.1000e-004	0.0900	0.0237	5.7000e-004	0.0243		73.9670	73.9670	3.3600e-003		74.0376
Total	**0.0214**	**0.0283**	**0.2999**	**1.0300e-003**	**0.0894**	**6.1000e-004**	**0.0900**	**0.0237**	**5.7000e-004**	**0.0243**		**73.9670**	**73.9670**	**3.3600e-003**		**74.0376**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2925	2.6612	2.9587	5.0800e-003		0.1270	0.1270		0.1185	0.1185	0.0000	464.3250	464.3250	0.1335		467.1291
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2925**	**2.6612**	**2.9587**	**5.0800e-003**		**0.1270**	**0.1270**		**0.1185**	**0.1185**	**0.0000**	**464.3250**	**464.3250**	**0.1335**		**467.1291**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0214	0.0283	0.2999	1.0300e-003	0.0894	6.1000e-004	0.0900	0.0237	5.7000e-004	0.0243		73.9670	73.9670	3.3600e-003		74.0376
Total	**0.0214**	**0.0283**	**0.2999**	**1.0300e-003**	**0.0894**	**6.1000e-004**	**0.0900**	**0.0237**	**5.7000e-004**	**0.0243**		**73.9670**	**73.9670**	**3.3600e-003**		**74.0376**

3.8 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	31.4289					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9057
Total	**31.6711**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**		**281.4481**	**281.4481**	**0.0218**		**281.9057**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0161	0.0212	0.2249	7.7000e-004	0.0671	4.6000e-004	0.0675	0.0178	4.3000e-004	0.0182		55.4753	55.4753	2.5200e-003		55.5282
Total	**0.0161**	**0.0212**	**0.2249**	**7.7000e-004**	**0.0671**	**4.6000e-004**	**0.0675**	**0.0178**	**4.3000e-004**	**0.0182**		**55.4753**	**55.4753**	**2.5200e-003**		**55.5282**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	31.4289					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9057
Total	**31.6711**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**	**0.0000**	**281.4481**	**281.4481**	**0.0218**		**281.9057**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0161	0.0212	0.2249	7.7000e-004	0.0671	4.6000e-004	0.0675	0.0178	4.3000e-004	0.0182		55.4753	55.4753	2.5200e-003		55.5282
Total	**0.0161**	**0.0212**	**0.2249**	**7.7000e-004**	**0.0671**	**4.6000e-004**	**0.0675**	**0.0178**	**4.3000e-004**	**0.0182**		**55.4753**	**55.4753**	**2.5200e-003**		**55.5282**

Technology Building Renovation

Orange County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	25.77	1000sqft	0.59	25,773.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment -

Grading - modified

Architectural Coating - modified

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblConstructionPhase	NumDays	5.00	20.00
tblConstructionPhase	NumDays	10.00	1.00
tblConstructionPhase	NumDays	2.00	1.00
tblConstructionPhase	NumDays	5.00	1.00
tblConstructionPhase	PhaseEndDate	10/27/2015	5/1/2020
tblConstructionPhase	PhaseEndDate	1/19/2015	6/9/2015
tblConstructionPhase	PhaseEndDate	1/2/2015	1/15/2015
tblConstructionPhase	PhaseStartDate	6/10/2015	12/16/2019
tblConstructionPhase	PhaseStartDate	1/17/2015	6/9/2015
tblConstructionPhase	PhaseStartDate	1/2/2015	1/15/2015
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2020

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2019	8.5500e-003	0.0767	0.0668	1.1000e-004	8.7000e-004	4.6200e-003	5.5000e-003	2.3000e-004	4.3300e-003	4.5700e-003	0.0000	9.3987	9.3987	2.1600e-003	0.0000	9.4441
2020	0.1784	0.5274	0.4991	8.3000e-004	6.6200e-003	0.0304	0.0371	1.7800e-003	0.0286	0.0304	0.0000	70.4206	70.4206	0.0159	0.0000	70.7542
Total	**0.1869**	**0.6041**	**0.5660**	**9.4000e-004**	**7.4900e-003**	**0.0351**	**0.0426**	**2.0100e-003**	**0.0329**	**0.0349**	**0.0000**	**79.8193**	**79.8193**	**0.0181**	**0.0000**	**80.1984**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2019	8.5500e-003	0.0767	0.0668	1.1000e-004	8.7000e-004	4.6200e-003	5.5000e-003	2.3000e-004	4.3300e-003	4.5700e-003	0.0000	9.3987	9.3987	2.1600e-003	0.0000	9.4441
2020	0.1784	0.5274	0.4991	8.3000e-004	6.6200e-003	0.0304	0.0371	1.7800e-003	0.0286	0.0304	0.0000	70.4205	70.4205	0.0159	0.0000	70.7541
Total	**0.1869**	**0.6041**	**0.5660**	**9.4000e-004**	**7.4900e-003**	**0.0351**	**0.0426**	**2.0100e-003**	**0.0329**	**0.0349**	**0.0000**	**79.8192**	**79.8192**	**0.0181**	**0.0000**	**80.1983**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2015	1/1/2015	5	1	
2	Site Preparation	Site Preparation	1/15/2015	1/15/2015	5	1	
3	Grading	Grading	1/16/2015	1/16/2015	5	1	
4	Paving	Paving	6/9/2015	6/9/2015	5	1	
5	Building Construction	Building Construction	12/16/2019	5/1/2020	5	100	
6	Architectural Coating	Architectural Coating	5/2/2020	5/29/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 38,660; Non-Residential Outdoor: 12,887 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	0	6.00	9	0.56
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Grading	Concrete/Industrial Saws	0	8.00	81	0.73
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	0	8.00	174	0.41
Paving	Pavers	0	7.00	125	0.42
Paving	Rollers	0	7.00	80	0.38
Demolition	Rubber Tired Dozers	0	1.00	255	0.40
Grading	Rubber Tired Dozers	0	1.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37

Demolition	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Welders	1	4.00	46	0.45
Building Construction	Generator Sets	1	4.00	84	0.74

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	11.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Grading - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Paving - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.2000e-003	0.0747	0.0617	1.0000e-004		4.5900e-003	4.5900e-003		4.3000e-003	4.3000e-003	0.0000	8.3647	8.3647	2.1300e-003	0.0000	8.4095
Total	**8.2000e-003**	**0.0747**	**0.0617**	**1.0000e-004**		**4.5900e-003**	**4.5900e-003**		**4.3000e-003**	**4.3000e-003**	**0.0000**	**8.3647**	**8.3647**	**2.1300e-003**	**0.0000**	**8.4095**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.8000e-004	1.6800e-003	2.4400e-003	1.0000e-005	1.5000e-004	3.0000e-005	1.7000e-004	4.0000e-005	2.0000e-005	7.0000e-005	0.0000	0.4486	0.4486	0.0000	0.0000	0.4487
Worker	1.7000e-004	2.6000e-004	2.7000e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.3000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.5854	0.5854	3.0000e-005	0.0000	0.5860
Total	**3.5000e-004**	**1.9400e-003**	**5.1400e-003**	**2.0000e-005**	**8.7000e-004**	**4.0000e-005**	**9.0000e-004**	**2.3000e-004**	**2.0000e-005**	**2.7000e-004**	**0.0000**	**1.0341**	**1.0341**	**3.0000e-005**	**0.0000**	**1.0347**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.2000e-003	0.0747	0.0617	1.0000e-004		4.5900e-003	4.5900e-003		4.3000e-003	4.3000e-003	0.0000	8.3647	8.3647	2.1300e-003	0.0000	8.4095
Total	**8.2000e-003**	**0.0747**	**0.0617**	**1.0000e-004**		**4.5900e-003**	**4.5900e-003**		**4.3000e-003**	**4.3000e-003**	**0.0000**	**8.3647**	**8.3647**	**2.1300e-003**	**0.0000**	**8.4095**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.8000e-004	1.6800e-003	2.4400e-003	1.0000e-005	1.5000e-004	3.0000e-005	1.7000e-004	4.0000e-005	2.0000e-005	7.0000e-005	0.0000	0.4486	0.4486	0.0000	0.0000	0.4487
Worker	1.7000e-004	2.6000e-004	2.7000e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.3000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.5854	0.5854	3.0000e-005	0.0000	0.5860
Total	**3.5000e-004**	**1.9400e-003**	**5.1400e-003**	**2.0000e-005**	**8.7000e-004**	**4.0000e-005**	**9.0000e-004**	**2.3000e-004**	**2.0000e-005**	**2.7000e-004**	**0.0000**	**1.0341**	**1.0341**	**3.0000e-005**	**0.0000**	**1.0347**

3.6 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0540	0.4980	0.4444	7.0000e-004		0.0291	0.0291		0.0273	0.0273	0.0000	60.3606	60.3606	0.0155	0.0000	60.6856
Total	**0.0540**	**0.4980**	**0.4444**	**7.0000e-004**		**0.0291**	**0.0291**		**0.0273**	**0.0273**	**0.0000**	**60.3606**	**60.3606**	**0.0155**	**0.0000**	**60.6856**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2200e-003	0.0107	0.0171	4.0000e-005	1.0800e-003	1.7000e-004	1.2600e-003	3.1000e-004	1.6000e-004	4.7000e-004	0.0000	3.2153	3.2153	2.0000e-005	0.0000	3.2158
Worker	1.2100e-003	1.7600e-003	0.0186	6.0000e-005	5.3100e-003	4.0000e-005	5.3500e-003	1.4100e-003	3.0000e-005	1.4500e-003	0.0000	4.1211	4.1211	1.8000e-004	0.0000	4.1250
Total	**2.4300e-003**	**0.0125**	**0.0356**	**1.0000e-004**	**6.3900e-003**	**2.1000e-004**	**6.6100e-003**	**1.7200e-003**	**1.9000e-004**	**1.9200e-003**	**0.0000**	**7.3364**	**7.3364**	**2.0000e-004**	**0.0000**	**7.3408**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0540	0.4980	0.4444	7.0000e-004		0.0291	0.0291		0.0273	0.0273	0.0000	60.3606	60.3606	0.0155	0.0000	60.6855
Total	**0.0540**	**0.4980**	**0.4444**	**7.0000e-004**		**0.0291**	**0.0291**		**0.0273**	**0.0273**	**0.0000**	**60.3606**	**60.3606**	**0.0155**	**0.0000**	**60.6855**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2200e-003	0.0107	0.0171	4.0000e-005	1.0800e-003	1.7000e-004	1.2600e-003	3.1000e-004	1.6000e-004	4.7000e-004	0.0000	3.2153	3.2153	2.0000e-005	0.0000	3.2158
Worker	1.2100e-003	1.7600e-003	0.0186	6.0000e-005	5.3100e-003	4.0000e-005	5.3500e-003	1.4100e-003	3.0000e-005	1.4500e-003	0.0000	4.1211	4.1211	1.8000e-004	0.0000	4.1250
Total	**2.4300e-003**	**0.0125**	**0.0356**	**1.0000e-004**	**6.3900e-003**	**2.1000e-004**	**6.6100e-003**	**1.7200e-003**	**1.9000e-004**	**1.9200e-003**	**0.0000**	**7.3364**	**7.3364**	**2.0000e-004**	**0.0000**	**7.3408**

3.7 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1195					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Off-Road	2.4200e-003	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5574
Total	**0.1219**	**0.0168**	**0.0183**	**3.0000e-005**		**1.1100e-003**	**1.1100e-003**		**1.1100e-003**	**1.1100e-003**	**0.0000**	**2.5533**	**2.5533**	**2.0000e-004**	**0.0000**	**2.5574**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	7.0000e-005	7.7000e-004	0.0000	2.2000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1703	0.1703	1.0000e-005	0.0000	0.1705
Total	**5.0000e-005**	**7.0000e-005**	**7.7000e-004**	**0.0000**	**2.2000e-004**	**0.0000**	**2.2000e-004**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**0.1703**	**0.1703**	**1.0000e-005**	**0.0000**	**0.1705**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1195					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4200e-003	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5574
Total	**0.1219**	**0.0168**	**0.0183**	**3.0000e-005**		**1.1100e-003**	**1.1100e-003**		**1.1100e-003**	**1.1100e-003**	**0.0000**	**2.5533**	**2.5533**	**2.0000e-004**	**0.0000**	**2.5574**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	7.0000e-005	7.7000e-004	0.0000	2.2000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1703	0.1703	1.0000e-005	0.0000	0.1705
Total	**5.0000e-005**	**7.0000e-005**	**7.7000e-004**	**0.0000**	**2.2000e-004**	**0.0000**	**2.2000e-004**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**0.1703**	**0.1703**	**1.0000e-005**	**0.0000**	**0.1705**

Technology Building Renovation

Orange County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	25.77	1000sqft	0.59	25,773.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment -

Grading - modified

Architectural Coating - modified

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblConstructionPhase	NumDays	5.00	20.00
tblConstructionPhase	NumDays	10.00	1.00
tblConstructionPhase	NumDays	2.00	1.00
tblConstructionPhase	NumDays	5.00	1.00
tblConstructionPhase	PhaseEndDate	10/27/2015	5/1/2020
tblConstructionPhase	PhaseEndDate	1/19/2015	6/9/2015
tblConstructionPhase	PhaseEndDate	1/2/2015	1/15/2015
tblConstructionPhase	PhaseStartDate	6/10/2015	12/16/2019
tblConstructionPhase	PhaseStartDate	1/17/2015	6/9/2015
tblConstructionPhase	PhaseStartDate	1/2/2015	1/15/2015
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2020

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2019	1.4247	12.7627	11.1002	0.0183	0.1480	0.7705	0.9185	0.0397	0.7219	0.7616	0.0000	1,731.3513	1,731.3513	0.3974	0.0000	1,739.6957
2020	12.1934	11.5883	10.8703	0.0183	0.1480	0.6663	0.8143	0.0397	0.6243	0.6641	0.0000	1,700.4397	1,700.4397	0.3929	0.0000	1,708.6896
Total	**13.6181**	**24.3509**	**21.9705**	**0.0365**	**0.2959**	**1.4368**	**1.7327**	**0.0795**	**1.3462**	**1.4257**	**0.0000**	**3,431.7910**	**3,431.7910**	**0.7902**	**0.0000**	**3,448.3853**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2019	1.4247	12.7627	11.1002	0.0183	0.1480	0.7705	0.9185	0.0397	0.7219	0.7616	0.0000	1,731.3513	1,731.3513	0.3974	0.0000	1,739.6957
2020	12.1934	11.5883	10.8703	0.0183	0.1480	0.6663	0.8143	0.0397	0.6243	0.6641	0.0000	1,700.4397	1,700.4397	0.3929	0.0000	1,708.6896
Total	**13.6181**	**24.3509**	**21.9705**	**0.0365**	**0.2959**	**1.4368**	**1.7327**	**0.0795**	**1.3462**	**1.4257**	**0.0000**	**3,431.7910**	**3,431.7910**	**0.7902**	**0.0000**	**3,448.3853**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2015	1/1/2015	5	1	
2	Site Preparation	Site Preparation	1/15/2015	1/15/2015	5	1	
3	Grading	Grading	1/16/2015	1/16/2015	5	1	
4	Paving	Paving	6/9/2015	6/9/2015	5	1	
5	Building Construction	Building Construction	12/16/2019	5/1/2020	5	100	
6	Architectural Coating	Architectural Coating	5/2/2020	5/29/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 38,660; Non-Residential Outdoor: 12,887 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	0	6.00	9	0.56
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Grading	Concrete/Industrial Saws	0	8.00	81	0.73
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	0	8.00	174	0.41
Paving	Pavers	0	7.00	125	0.42
Paving	Rollers	0	7.00	80	0.38
Demolition	Rubber Tired Dozers	0	1.00	255	0.40
Grading	Rubber Tired Dozers	0	1.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37

Demolition	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Welders	1	4.00	46	0.45
Building Construction	Generator Sets	1	4.00	84	0.74

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	11.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.4 Grading - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.5 Paving - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.6 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3667	12.4568	10.2835	0.0159		0.7654	0.7654		0.7172	0.7172		1,536.7438	1,536.7438	0.3919		1,544.9738
Total	**1.3667**	**12.4568**	**10.2835**	**0.0159**		**0.7654**	**0.7654**		**0.7172**	**0.7172**		**1,536.7438**	**1,536.7438**	**0.3919**		**1,544.9738**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0283	0.2680	0.3458	8.6000e-004	0.0250	4.3000e-003	0.0293	7.1200e-003	3.9600e-003	0.0111		82.7168	82.7168	6.0000e-004		82.7294
Worker	0.0297	0.0379	0.4709	1.5000e-003	0.1230	8.4000e-004	0.1238	0.0326	7.8000e-004	0.0334		111.8907	111.8907	4.8500e-003		111.9926
Total	**0.0580**	**0.3059**	**0.8167**	**2.3600e-003**	**0.1480**	**5.1400e-003**	**0.1531**	**0.0397**	**4.7400e-003**	**0.0445**		**194.6075**	**194.6075**	**5.4500e-003**		**194.7219**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3667	12.4568	10.2835	0.0159		0.7654	0.7654		0.7172	0.7172	0.0000	1,536.7438	1,536.7438	0.3919		1,544.9738
Total	**1.3667**	**12.4568**	**10.2835**	**0.0159**		**0.7654**	**0.7654**		**0.7172**	**0.7172**	**0.0000**	**1,536.7438**	**1,536.7438**	**0.3919**		**1,544.9738**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0283	0.2680	0.3458	8.6000e-004	0.0250	4.3000e-003	0.0293	7.1200e-003	3.9600e-003	0.0111		82.7168	82.7168	6.0000e-004		82.7294
Worker	0.0297	0.0379	0.4709	1.5000e-003	0.1230	8.4000e-004	0.1238	0.0326	7.8000e-004	0.0334		111.8907	111.8907	4.8500e-003		111.9926
Total	**0.0580**	**0.3059**	**0.8167**	**2.3600e-003**	**0.1480**	**5.1400e-003**	**0.1531**	**0.0397**	**4.7400e-003**	**0.0445**		**194.6075**	**194.6075**	**5.4500e-003**		**194.7219**

3.6 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2274	11.3189	10.1009	0.0159		0.6615	0.6615		0.6199	0.6199		1,512.1867	1,512.1867	0.3876		1,520.3273
Total	**1.2274**	**11.3189**	**10.1009**	**0.0159**		**0.6615**	**0.6615**		**0.6199**	**0.6199**		**1,512.1867**	**1,512.1867**	**0.3876**		**1,520.3273**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0262	0.2340	0.3272	8.6000e-004	0.0250	3.9300e-003	0.0289	7.1200e-003	3.6200e-003	0.0107		80.8401	80.8401	5.9000e-004		80.8524
Worker	0.0281	0.0354	0.4422	1.5000e-003	0.1230	8.4000e-004	0.1238	0.0326	7.8000e-004	0.0334		107.4128	107.4128	4.6200e-003		107.5099
Total	**0.0543**	**0.2694**	**0.7694**	**2.3600e-003**	**0.1480**	**4.7700e-003**	**0.1527**	**0.0397**	**4.4000e-003**	**0.0441**		**188.2530**	**188.2530**	**5.2100e-003**		**188.3623**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2274	11.3189	10.1009	0.0159		0.6615	0.6615		0.6199	0.6199	0.0000	1,512.1867	1,512.1867	0.3876		1,520.3273
Total	**1.2274**	**11.3189**	**10.1009**	**0.0159**		**0.6615**	**0.6615**		**0.6199**	**0.6199**	**0.0000**	**1,512.1867**	**1,512.1867**	**0.3876**		**1,520.3273**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0262	0.2340	0.3272	8.6000e-004	0.0250	3.9300e-003	0.0289	7.1200e-003	3.6200e-003	0.0107		80.8401	80.8401	5.9000e-004		80.8524
Worker	0.0281	0.0354	0.4422	1.5000e-003	0.1230	8.4000e-004	0.1238	0.0326	7.8000e-004	0.0334		107.4128	107.4128	4.6200e-003		107.5099
Total	**0.0543**	**0.2694**	**0.7694**	**2.3600e-003**	**0.1480**	**4.7700e-003**	**0.1527**	**0.0397**	**4.4000e-003**	**0.0441**		**188.2530**	**188.2530**	**5.2100e-003**		**188.3623**

3.7 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	11.9461					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9057
Total	**12.1883**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**		**281.4481**	**281.4481**	**0.0218**		**281.9057**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	5.1000e-003	6.4300e-003	0.0804	2.7000e-004	0.0224	1.5000e-004	0.0225	5.9300e-003	1.4000e-004	6.0700e-003		19.5296	19.5296	8.4000e-004		19.5473
Total	**5.1000e-003**	**6.4300e-003**	**0.0804**	**2.7000e-004**	**0.0224**	**1.5000e-004**	**0.0225**	**5.9300e-003**	**1.4000e-004**	**6.0700e-003**		**19.5296**	**19.5296**	**8.4000e-004**		**19.5473**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	11.9461					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9057
Total	**12.1883**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**	**0.0000**	**281.4481**	**281.4481**	**0.0218**		**281.9057**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	5.1000e-003	6.4300e-003	0.0804	2.7000e-004	0.0224	1.5000e-004	0.0225	5.9300e-003	1.4000e-004	6.0700e-003		19.5296	19.5296	8.4000e-004		19.5473
Total	**5.1000e-003**	**6.4300e-003**	**0.0804**	**2.7000e-004**	**0.0224**	**1.5000e-004**	**0.0225**	**5.9300e-003**	**1.4000e-004**	**6.0700e-003**		**19.5296**	**19.5296**	**8.4000e-004**		**19.5473**

Technology Building Renovation

Orange County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	25.77	1000sqft	0.59	25,773.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment -

Grading - modified

Architectural Coating - modified

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblConstructionPhase	NumDays	5.00	20.00
tblConstructionPhase	NumDays	10.00	1.00
tblConstructionPhase	NumDays	2.00	1.00
tblConstructionPhase	NumDays	5.00	1.00
tblConstructionPhase	PhaseEndDate	10/27/2015	5/1/2020
tblConstructionPhase	PhaseEndDate	1/19/2015	6/9/2015
tblConstructionPhase	PhaseEndDate	1/2/2015	1/15/2015
tblConstructionPhase	PhaseStartDate	6/10/2015	12/16/2019
tblConstructionPhase	PhaseStartDate	1/17/2015	6/9/2015
tblConstructionPhase	PhaseStartDate	1/2/2015	1/15/2015
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2020

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2019	1.4288	12.7723	11.1495	0.0182	0.1480	0.7706	0.9185	0.0397	0.7219	0.7617	0.0000	1,724.7088	1,724.7088	0.3974	0.0000	1,733.0536
2020	12.1937	11.5968	10.9206	0.0182	0.1480	0.6663	0.8143	0.0397	0.6244	0.6641	0.0000	1,694.0453	1,694.0453	0.3929	0.0000	1,702.2956
Total	**13.6225**	**24.3691**	**22.0700**	**0.0363**	**0.2959**	**1.4369**	**1.7328**	**0.0795**	**1.3463**	**1.4258**	**0.0000**	**3,418.7541**	**3,418.7541**	**0.7902**	**0.0000**	**3,435.3492**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2019	1.4288	12.7723	11.1495	0.0182	0.1480	0.7706	0.9185	0.0397	0.7219	0.7617	0.0000	1,724.7088	1,724.7088	0.3974	0.0000	1,733.0536
2020	12.1937	11.5968	10.9206	0.0182	0.1480	0.6663	0.8143	0.0397	0.6244	0.6641	0.0000	1,694.0453	1,694.0453	0.3929	0.0000	1,702.2956
Total	**13.6225**	**24.3691**	**22.0700**	**0.0363**	**0.2959**	**1.4369**	**1.7328**	**0.0795**	**1.3463**	**1.4258**	**0.0000**	**3,418.7541**	**3,418.7541**	**0.7902**	**0.0000**	**3,435.3492**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2015	1/1/2015	5	1	
2	Site Preparation	Site Preparation	1/15/2015	1/15/2015	5	1	
3	Grading	Grading	1/16/2015	1/16/2015	5	1	
4	Paving	Paving	6/9/2015	6/9/2015	5	1	
5	Building Construction	Building Construction	12/16/2019	5/1/2020	5	100	
6	Architectural Coating	Architectural Coating	5/2/2020	5/29/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 38,660; Non-Residential Outdoor: 12,887 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	0	6.00	9	0.56
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Grading	Concrete/Industrial Saws	0	8.00	81	0.73
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	0	8.00	174	0.41
Paving	Pavers	0	7.00	125	0.42
Paving	Rollers	0	7.00	80	0.38
Demolition	Rubber Tired Dozers	0	1.00	255	0.40
Grading	Rubber Tired Dozers	0	1.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37

Demolition	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Welders	1	4.00	46	0.45
Building Construction	Generator Sets	1	4.00	84	0.74

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	11.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.4 Grading - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.5 Paving - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.6 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3667	12.4568	10.2835	0.0159		0.7654	0.7654		0.7172	0.7172		1,536.7438	1,536.7438	0.3919		1,544.9738
Total	**1.3667**	**12.4568**	**10.2835**	**0.0159**		**0.7654**	**0.7654**		**0.7172**	**0.7172**		**1,536.7438**	**1,536.7438**	**0.3919**		**1,544.9738**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0310	0.2739	0.4262	8.6000e-004	0.0250	4.3400e-003	0.0294	7.1200e-003	3.9900e-003	0.0111		82.0167	82.0167	6.2000e-004		82.0297
Worker	0.0311	0.0416	0.4397	1.4200e-003	0.1230	8.4000e-004	0.1238	0.0326	7.8000e-004	0.0334		105.9482	105.9482	4.8500e-003		106.0501
Total	**0.0621**	**0.3156**	**0.8660**	**2.2800e-003**	**0.1480**	**5.1800e-003**	**0.1531**	**0.0397**	**4.7700e-003**	**0.0445**		**187.9650**	**187.9650**	**5.4700e-003**		**188.0798**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3667	12.4568	10.2835	0.0159		0.7654	0.7654		0.7172	0.7172	0.0000	1,536.7438	1,536.7438	0.3919		1,544.9738
Total	**1.3667**	**12.4568**	**10.2835**	**0.0159**		**0.7654**	**0.7654**		**0.7172**	**0.7172**	**0.0000**	**1,536.7438**	**1,536.7438**	**0.3919**		**1,544.9738**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0310	0.2739	0.4262	8.6000e-004	0.0250	4.3400e-003	0.0294	7.1200e-003	3.9900e-003	0.0111		82.0167	82.0167	6.2000e-004		82.0297
Worker	0.0311	0.0416	0.4397	1.4200e-003	0.1230	8.4000e-004	0.1238	0.0326	7.8000e-004	0.0334		105.9482	105.9482	4.8500e-003		106.0501
Total	**0.0621**	**0.3156**	**0.8660**	**2.2800e-003**	**0.1480**	**5.1800e-003**	**0.1531**	**0.0397**	**4.7700e-003**	**0.0445**		**187.9650**	**187.9650**	**5.4700e-003**		**188.0798**

3.6 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2274	11.3189	10.1009	0.0159		0.6615	0.6615		0.6199	0.6199		1,512.1867	1,512.1867	0.3876		1,520.3273
Total	**1.2274**	**11.3189**	**10.1009**	**0.0159**		**0.6615**	**0.6615**		**0.6199**	**0.6199**		**1,512.1867**	**1,512.1867**	**0.3876**		**1,520.3273**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0286	0.2390	0.4074	8.6000e-004	0.0250	3.9700e-003	0.0290	7.1200e-003	3.6500e-003	0.0108		80.1539	80.1539	6.1000e-004		80.1666
Worker	0.0294	0.0389	0.4123	1.4200e-003	0.1230	8.4000e-004	0.1238	0.0326	7.8000e-004	0.0334		101.7047	101.7047	4.6200e-003		101.8017
Total	**0.0580**	**0.2779**	**0.8197**	**2.2800e-003**	**0.1480**	**4.8100e-003**	**0.1528**	**0.0397**	**4.4300e-003**	**0.0442**		**181.8586**	**181.8586**	**5.2300e-003**		**181.9684**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2274	11.3189	10.1009	0.0159		0.6615	0.6615		0.6199	0.6199	0.0000	1,512.1867	1,512.1867	0.3876		1,520.3273
Total	**1.2274**	**11.3189**	**10.1009**	**0.0159**		**0.6615**	**0.6615**		**0.6199**	**0.6199**	**0.0000**	**1,512.1867**	**1,512.1867**	**0.3876**		**1,520.3273**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0286	0.2390	0.4074	8.6000e-004	0.0250	3.9700e-003	0.0290	7.1200e-003	3.6500e-003	0.0108		80.1539	80.1539	6.1000e-004		80.1666
Worker	0.0294	0.0389	0.4123	1.4200e-003	0.1230	8.4000e-004	0.1238	0.0326	7.8000e-004	0.0334		101.7047	101.7047	4.6200e-003		101.8017
Total	**0.0580**	**0.2779**	**0.8197**	**2.2800e-003**	**0.1480**	**4.8100e-003**	**0.1528**	**0.0397**	**4.4300e-003**	**0.0442**		**181.8586**	**181.8586**	**5.2300e-003**		**181.9684**

3.7 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	11.9461					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9057
Total	**12.1883**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**		**281.4481**	**281.4481**	**0.0218**		**281.9057**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	5.3500e-003	7.0700e-003	0.0750	2.6000e-004	0.0224	1.5000e-004	0.0225	5.9300e-003	1.4000e-004	6.0700e-003		18.4918	18.4918	8.4000e-004		18.5094
Total	**5.3500e-003**	**7.0700e-003**	**0.0750**	**2.6000e-004**	**0.0224**	**1.5000e-004**	**0.0225**	**5.9300e-003**	**1.4000e-004**	**6.0700e-003**		**18.4918**	**18.4918**	**8.4000e-004**		**18.5094**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	11.9461					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9057
Total	**12.1883**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**	**0.0000**	**281.4481**	**281.4481**	**0.0218**		**281.9057**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	5.3500e-003	7.0700e-003	0.0750	2.6000e-004	0.0224	1.5000e-004	0.0225	5.9300e-003	1.4000e-004	6.0700e-003		18.4918	18.4918	8.4000e-004		18.5094
Total	**5.3500e-003**	**7.0700e-003**	**0.0750**	**2.6000e-004**	**0.0224**	**1.5000e-004**	**0.0225**	**5.9300e-003**	**1.4000e-004**	**6.0700e-003**		**18.4918**	**18.4918**	**8.4000e-004**		**18.5094**

CONSTRUCTION PHASE III

Annual, Summer, and Winter Emissions

Business/Social Science/Admin Office Building

Orange County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	101.95	1000sqft	2.34	101,954.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment -

Off-road Equipment - modified

Off-road Equipment -

Grading - modified

Demolition -

Architectural Coating - modified

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	3.00	1.00
tblConstructionPhase	PhaseEndDate	2/26/2015	6/26/2020
tblConstructionPhase	PhaseStartDate	1/30/2015	6/1/2020
tblGrading	AcresOfGrading	6.00	3.00
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.50	0.50
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Trenchers
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2021

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2020	0.1732	1.3573	1.2745	2.4200e-003	0.0610	0.0702	0.1312	0.0136	0.0669	0.0805	0.0000	196.7156	196.7156	0.0332	0.0000	197.4130
2021	0.5911	0.8914	0.9382	1.8100e-003	0.0307	0.0439	0.0746	8.2500e-003	0.0421	0.0503	0.0000	145.0398	145.0398	0.0224	0.0000	145.5099
Total	**0.7643**	**2.2487**	**2.2127**	**4.2300e-003**	**0.0917**	**0.1141**	**0.2058**	**0.0219**	**0.1089**	**0.1308**	**0.0000**	**341.7554**	**341.7554**	**0.0556**	**0.0000**	**342.9229**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2020	0.1732	1.3573	1.2745	2.4200e-003	0.0610	0.0702	0.1312	0.0136	0.0669	0.0805	0.0000	196.7154	196.7154	0.0332	0.0000	197.4128
2021	0.5911	0.8914	0.9382	1.8100e-003	0.0307	0.0439	0.0746	8.2500e-003	0.0421	0.0503	0.0000	145.0397	145.0397	0.0224	0.0000	145.5097
Total	**0.7643**	**2.2487**	**2.2127**	**4.2300e-003**	**0.0917**	**0.1141**	**0.2058**	**0.0219**	**0.1089**	**0.1308**	**0.0000**	**341.7551**	**341.7551**	**0.0556**	**0.0000**	**342.9225**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/29/2015	1/29/2015	5	1	
2	Demolition	Demolition	6/1/2020	6/26/2020	5	20	
3	Grading	Grading	6/27/2020	7/6/2020	5	6	
4	Trenching	Trenching	7/7/2020	7/20/2020	5	10	
5	Building Construction	Building Construction	7/21/2020	5/24/2021	5	220	
6	Paving	Paving	5/25/2021	6/7/2021	5	10	
7	Architectural Coating	Architectural Coating	6/8/2021	7/5/2021	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 3

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 152,931; Non-Residential Outdoor: 50,977 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	8.00	226	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Site Preparation	Graders	0	8.00	174	0.41
Paving	Pavers	0	8.00	125	0.42
Paving	Rollers	0	8.00	80	0.38
Demolition	Rubber Tired Dozers	0	8.00	255	0.40
Grading	Rubber Tired Dozers	0	8.00	255	0.40

Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Grading	Graders	1	8.00	174	0.41
Paving	Paving Equipment	1	8.00	130	0.36
Site Preparation	Scrapers	0	8.00	361	0.48
Building Construction	Welders	3	8.00	46	0.45
Demolition	Crawler Tractors	1	8.00	208	0.43
Grading	Crawler Tractors	1	8.00	208	0.43
Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Trenchers	1	8.00	80	0.50
Trenching	Plate Compactors	1	8.00	8	0.43

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	201.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	43.00	17.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	9.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0217	0.0000	0.0217	3.2900e-003	0.0000	3.2900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0141	0.1482	0.1070	2.0000e-004		7.4000e-003	7.4000e-003		6.9600e-003	6.9600e-003	0.0000	17.6016	17.6016	4.2900e-003	0.0000	17.6918
Total	**0.0141**	**0.1482**	**0.1070**	**2.0000e-004**	**0.0217**	**7.4000e-003**	**0.0291**	**3.2900e-003**	**6.9600e-003**	**0.0103**	**0.0000**	**17.6016**	**17.6016**	**4.2900e-003**	**0.0000**	**17.6918**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.6100e-003	0.0208	0.0197	7.0000e-005	1.7200e-003	3.7000e-004	2.1000e-003	4.7000e-004	3.4000e-004	8.1000e-004	0.0000	6.2915	6.2915	5.0000e-005	0.0000	6.2926
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5000e-004	3.6000e-004	3.8300e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.8515	0.8515	4.0000e-005	0.0000	0.8523
Total	**1.8600e-003**	**0.0212**	**0.0235**	**8.0000e-005**	**2.8200e-003**	**3.8000e-004**	**3.2100e-003**	**7.6000e-004**	**3.5000e-004**	**1.1100e-003**	**0.0000**	**7.1430**	**7.1430**	**9.0000e-005**	**0.0000**	**7.1448**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0217	0.0000	0.0217	3.2900e-003	0.0000	3.2900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0141	0.1482	0.1070	2.0000e-004		7.4000e-003	7.4000e-003		6.9600e-003	6.9600e-003	0.0000	17.6016	17.6016	4.2900e-003	0.0000	17.6918
Total	**0.0141**	**0.1482**	**0.1070**	**2.0000e-004**	**0.0217**	**7.4000e-003**	**0.0291**	**3.2900e-003**	**6.9600e-003**	**0.0103**	**0.0000**	**17.6016**	**17.6016**	**4.2900e-003**	**0.0000**	**17.6918**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Hauling	1.6100e-003	0.0208	0.0197	7.0000e-005	1.7200e-003	3.7000e-004	2.1000e-003	4.7000e-004	3.4000e-004	8.1000e-004	0.0000	6.2915	6.2915	5.0000e-005	0.0000	6.2926
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5000e-004	3.6000e-004	3.8300e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.8515	0.8515	4.0000e-005	0.0000	0.8523
Total	**1.8600e-003**	**0.0212**	**0.0235**	**8.0000e-005**	**2.8200e-003**	**3.8000e-004**	**3.2100e-003**	**7.6000e-004**	**3.5000e-004**	**1.1100e-003**	**0.0000**	**7.1430**	**7.1430**	**9.0000e-005**	**0.0000**	**7.1448**

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.5900e-003	0.0000	1.5900e-003	1.7000e-004	0.0000	1.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.9400e-003	0.0539	0.0330	6.0000e-005		2.6900e-003	2.6900e-003		2.4700e-003	2.4700e-003	0.0000	5.0998	5.0998	1.6500e-003	0.0000	5.1345
Total	**4.9400e-003**	**0.0539**	**0.0330**	**6.0000e-005**	**1.5900e-003**	**2.6900e-003**	**4.2800e-003**	**1.7000e-004**	**2.4700e-003**	**2.6400e-003**	**0.0000**	**5.0998**	**5.0998**	**1.6500e-003**	**0.0000**	**5.1345**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-005	1.1000e-004	1.1500e-003	0.0000	3.3000e-004	0.0000	3.3000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2554	0.2554	1.0000e-005	0.0000	0.2557

Total	**7.0000e-005**	**1.1000e-004**	**1.1500e-003**	**0.0000**	**3.3000e-004**	**0.0000**	**3.3000e-004**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**0.0000**	**0.2554**	**0.2554**	**1.0000e-005**	**0.0000**	**0.2557**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.5900e-003	0.0000	1.5900e-003	1.7000e-004	0.0000	1.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.9400e-003	0.0539	0.0330	6.0000e-005		2.6900e-003	2.6900e-003		2.4700e-003	2.4700e-003	0.0000	5.0998	5.0998	1.6500e-003	0.0000	5.1345
Total	**4.9400e-003**	**0.0539**	**0.0330**	**6.0000e-005**	**1.5900e-003**	**2.6900e-003**	**4.2800e-003**	**1.7000e-004**	**2.4700e-003**	**2.6400e-003**	**0.0000**	**5.0998**	**5.0998**	**1.6500e-003**	**0.0000**	**5.1345**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-005	1.1000e-004	1.1500e-003	0.0000	3.3000e-004	0.0000	3.3000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2554	0.2554	1.0000e-005	0.0000	0.2557
Total	**7.0000e-005**	**1.1000e-004**	**1.1500e-003**	**0.0000**	**3.3000e-004**	**0.0000**	**3.3000e-004**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**0.0000**	**0.2554**	**0.2554**	**1.0000e-005**	**0.0000**	**0.2557**

3.5 Trenching - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.4500e-003	0.0418	0.0373	5.0000e-005		2.8400e-003	2.8400e-003		2.6200e-003	2.6200e-003	0.0000	4.4019	4.4019	1.3900e-003	0.0000	4.4310
Total	**4.4500e-003**	**0.0418**	**0.0373**	**5.0000e-005**		**2.8400e-003**	**2.8400e-003**		**2.6200e-003**	**2.6200e-003**	**0.0000**	**4.4019**	**4.4019**	**1.3900e-003**	**0.0000**	**4.4310**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	1.8000e-004	1.9200e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4257	0.4257	2.0000e-005	0.0000	0.4261
Total	**1.2000e-004**	**1.8000e-004**	**1.9200e-003**	**1.0000e-005**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4257**	**0.4257**	**2.0000e-005**	**0.0000**	**0.4261**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Off-Road	4.4500e-003	0.0418	0.0373	5.0000e-005		2.8400e-003	2.8400e-003		2.6200e-003	2.6200e-003	0.0000	4.4019	4.4019	1.3900e-003	0.0000	4.4310
Total	**4.4500e-003**	**0.0418**	**0.0373**	**5.0000e-005**		**2.8400e-003**	**2.8400e-003**		**2.6200e-003**	**2.6200e-003**	**0.0000**	**4.4019**	**4.4019**	**1.3900e-003**	**0.0000**	**4.4310**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	1.8000e-004	1.9200e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4257	0.4257	2.0000e-005	0.0000	0.4261
Total	**1.2000e-004**	**1.8000e-004**	**1.9200e-003**	**1.0000e-005**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4257**	**0.4257**	**2.0000e-005**	**0.0000**	**0.4261**

3.6 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1344	1.0217	0.8762	1.4700e-003		0.0557	0.0557		0.0534	0.0534	0.0000	121.8628	121.8628	0.0247	0.0000	122.3806
Total	**0.1344**	**1.0217**	**0.8762**	**1.4700e-003**		**0.0557**	**0.0557**		**0.0534**	**0.0534**	**0.0000**	**121.8628**	**121.8628**	**0.0247**	**0.0000**	**122.3806**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.9400e-003	0.0611	0.0971	2.2000e-004	6.1800e-003	9.9000e-004	7.1700e-003	1.7600e-003	9.1000e-004	2.6700e-003	0.0000	18.3237	18.3237	1.4000e-004	0.0000	18.3265
Worker	6.3400e-003	9.2100e-003	0.0973	3.3000e-004	0.0279	1.9000e-004	0.0281	7.4000e-003	1.8000e-004	7.5800e-003	0.0000	21.6017	21.6017	9.7000e-004	0.0000	21.6220
Total	**0.0133**	**0.0703**	**0.1944**	**5.5000e-004**	**0.0340**	**1.1800e-003**	**0.0352**	**9.1600e-003**	**1.0900e-003**	**0.0103**	**0.0000**	**39.9253**	**39.9253**	**1.1100e-003**	**0.0000**	**39.9485**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1344	1.0217	0.8762	1.4700e-003		0.0557	0.0557		0.0534	0.0534	0.0000	121.8627	121.8627	0.0247	0.0000	122.3804
Total	**0.1344**	**1.0217**	**0.8762**	**1.4700e-003**		**0.0557**	**0.0557**		**0.0534**	**0.0534**	**0.0000**	**121.8627**	**121.8627**	**0.0247**	**0.0000**	**122.3804**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.9400e-003	0.0611	0.0971	2.2000e-004	6.1800e-003	9.9000e-004	7.1700e-003	1.7600e-003	9.1000e-004	2.6700e-003	0.0000	18.3237	18.3237	1.4000e-004	0.0000	18.3265
Worker	6.3400e-003	9.2100e-003	0.0973	3.3000e-004	0.0279	1.9000e-004	0.0281	7.4000e-003	1.8000e-004	7.5800e-003	0.0000	21.6017	21.6017	9.7000e-004	0.0000	21.6220
Total	**0.0133**	**0.0703**	**0.1944**	**5.5000e-004**	**0.0340**	**1.1800e-003**	**0.0352**	**9.1600e-003**	**1.0900e-003**	**0.0103**	**0.0000**	**39.9253**	**39.9253**	**1.1100e-003**	**0.0000**	**39.9485**

3.6 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1038	0.8121	0.7405	1.2700e-003		0.0415	0.0415		0.0397	0.0397	0.0000	105.3413	105.3413	0.0207	0.0000	105.7750
Total	**0.1038**	**0.8121**	**0.7405**	**1.2700e-003**		**0.0415**	**0.0415**		**0.0397**	**0.0397**	**0.0000**	**105.3413**	**105.3413**	**0.0207**	**0.0000**	**105.7750**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.7900e-003	0.0448	0.0819	1.9000e-004	5.3400e-003	7.8000e-004	6.1200e-003	1.5200e-003	7.1000e-004	2.2400e-003	0.0000	15.8258	15.8258	1.2000e-004	0.0000	15.8283
Worker	5.2100e-003	7.4800e-003	0.0794	2.9000e-004	0.0241	1.7000e-004	0.0242	6.3900e-003	1.6000e-004	6.5500e-003	0.0000	18.3651	18.3651	8.0000e-004	0.0000	18.3819

Total	**0.0110**	**0.0523**	**0.1613**	**4.8000e-004**	**0.0294**	**9.5000e-004**	**0.0304**	**7.9100e-003**	**8.7000e-004**	**8.7900e-003**	**0.0000**	**34.1909**	**34.1909**	**9.2000e-004**	**0.0000**	**34.2102**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1038	0.8121	0.7405	1.2700e-003		0.0415	0.0415		0.0397	0.0397	0.0000	105.3412	105.3412	0.0207	0.0000	105.7749
Total	**0.1038**	**0.8121**	**0.7405**	**1.2700e-003**		**0.0415**	**0.0415**		**0.0397**	**0.0397**	**0.0000**	**105.3412**	**105.3412**	**0.0207**	**0.0000**	**105.7749**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.7900e-003	0.0448	0.0819	1.9000e-004	5.3400e-003	7.8000e-004	6.1200e-003	1.5200e-003	7.1000e-004	2.2400e-003	0.0000	15.8258	15.8258	1.2000e-004	0.0000	15.8283
Worker	5.2100e-003	7.4800e-003	0.0794	2.9000e-004	0.0241	1.7000e-004	0.0242	6.3900e-003	1.6000e-004	6.5500e-003	0.0000	18.3651	18.3651	8.0000e-004	0.0000	18.3819
Total	**0.0110**	**0.0523**	**0.1613**	**4.8000e-004**	**0.0294**	**9.5000e-004**	**0.0304**	**7.9100e-003**	**8.7000e-004**	**8.7900e-003**	**0.0000**	**34.1909**	**34.1909**	**9.2000e-004**	**0.0000**	**34.2102**

3.7 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.2400e-003	0.0114	0.0141	2.0000e-005		5.4000e-004	5.4000e-004		5.1000e-004	5.1000e-004	0.0000	1.9913	1.9913	5.9000e-004	0.0000	2.0037
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.2400e-003**	**0.0114**	**0.0141**	**2.0000e-005**		**5.4000e-004**	**5.4000e-004**		**5.1000e-004**	**5.1000e-004**	**0.0000**	**1.9913**	**1.9913**	**5.9000e-004**	**0.0000**	**2.0037**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	9.0000e-005	9.0000e-004	0.0000	2.7000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2094	0.2094	1.0000e-005	0.0000	0.2096
Total	**6.0000e-005**	**9.0000e-005**	**9.0000e-004**	**0.0000**	**2.7000e-004**	**0.0000**	**2.8000e-004**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**0.0000**	**0.2094**	**0.2094**	**1.0000e-005**	**0.0000**	**0.2096**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Off-Road	1.2400e-003	0.0114	0.0141	2.0000e-005		5.4000e-004	5.4000e-004		5.1000e-004	5.1000e-004	0.0000	1.9913	1.9913	5.9000e-004	0.0000	2.0037
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.2400e-003**	**0.0114**	**0.0141**	**2.0000e-005**		**5.4000e-004**	**5.4000e-004**		**5.1000e-004**	**5.1000e-004**	**0.0000**	**1.9913**	**1.9913**	**5.9000e-004**	**0.0000**	**2.0037**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	9.0000e-005	9.0000e-004	0.0000	2.7000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2094	0.2094	1.0000e-005	0.0000	0.2096
Total	**6.0000e-005**	**9.0000e-005**	**9.0000e-004**	**0.0000**	**2.7000e-004**	**0.0000**	**2.8000e-004**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**0.0000**	**0.2094**	**0.2094**	**1.0000e-005**	**0.0000**	**0.2096**

3.8 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4726					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1900e-003	0.0153	0.0182	3.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	2.5533	2.5533	1.8000e-004	0.0000	2.5569
Total	**0.4748**	**0.0153**	**0.0182**	**3.0000e-005**		**9.4000e-004**	**9.4000e-004**		**9.4000e-004**	**9.4000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.8000e-004**	**0.0000**	**2.5569**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	3.1000e-004	3.2600e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.7537	0.7537	3.0000e-005	0.0000	0.7544
Total	**2.1000e-004**	**3.1000e-004**	**3.2600e-003**	**1.0000e-005**	**9.9000e-004**	**1.0000e-005**	**9.9000e-004**	**2.6000e-004**	**1.0000e-005**	**2.7000e-004**	**0.0000**	**0.7537**	**0.7537**	**3.0000e-005**	**0.0000**	**0.7544**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4726					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1900e-003	0.0153	0.0182	3.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	2.5533	2.5533	1.8000e-004	0.0000	2.5569
Total	**0.4748**	**0.0153**	**0.0182**	**3.0000e-005**		**9.4000e-004**	**9.4000e-004**		**9.4000e-004**	**9.4000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.8000e-004**	**0.0000**	**2.5569**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	3.1000e-004	3.2600e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.7537	0.7537	3.0000e-005	0.0000	0.7544
Total	**2.1000e-004**	**3.1000e-004**	**3.2600e-003**	**1.0000e-005**	**9.9000e-004**	**1.0000e-005**	**9.9000e-004**	**2.6000e-004**	**1.0000e-005**	**2.7000e-004**	**0.0000**	**0.7537**	**0.7537**	**3.0000e-005**	**0.0000**	**0.7544**

Business/Social Science/Admin Office Building

Orange County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	101.95	1000sqft	2.34	101,954.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment -

Off-road Equipment - modified

Off-road Equipment -

Grading - modified

Demolition -

Architectural Coating - modified

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	3.00	1.00
tblConstructionPhase	PhaseEndDate	2/26/2015	6/26/2020
tblConstructionPhase	PhaseStartDate	1/30/2015	6/1/2020
tblGrading	AcresOfGrading	6.00	3.00
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.50	0.50
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Trenchers
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2021

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2020	2.4992	18.4496	17.9707	0.0344	2.4596	0.9634	3.2372	0.4066	0.9229	1.1378	0.0000	3,040.2498	3,040.2498	0.6103	0.0000	3,053.0651
2021	47.4964	16.8965	17.5078	0.0344	0.5869	0.8315	1.4184	0.1577	0.7962	0.9539	0.0000	3,033.1115	3,033.1115	0.4663	0.0000	3,042.9027
Total	**49.9956**	**35.3461**	**35.4785**	**0.0688**	**3.0465**	**1.7949**	**4.6556**	**0.5643**	**1.7191**	**2.0918**	**0.0000**	**6,073.3614**	**6,073.3614**	**1.0765**	**0.0000**	**6,095.9678**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2020	2.4992	18.4496	17.9707	0.0344	2.4596	0.9634	3.2372	0.4066	0.9229	1.1378	0.0000	3,040.2498	3,040.2498	0.6103	0.0000	3,053.0651
2021	47.4964	16.8965	17.5078	0.0344	0.5869	0.8315	1.4184	0.1577	0.7962	0.9539	0.0000	3,033.1115	3,033.1115	0.4663	0.0000	3,042.9027
Total	**49.9956**	**35.3461**	**35.4785**	**0.0688**	**3.0465**	**1.7949**	**4.6556**	**0.5643**	**1.7191**	**2.0918**	**0.0000**	**6,073.3614**	**6,073.3614**	**1.0765**	**0.0000**	**6,095.9678**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/29/2015	1/29/2015	5	1	
2	Demolition	Demolition	6/1/2020	6/26/2020	5	20	
3	Grading	Grading	6/27/2020	7/6/2020	5	6	
4	Trenching	Trenching	7/7/2020	7/20/2020	5	10	
5	Building Construction	Building Construction	7/21/2020	5/24/2021	5	220	
6	Paving	Paving	5/25/2021	6/7/2021	5	10	
7	Architectural Coating	Architectural Coating	6/8/2021	7/5/2021	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 3

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 152,931; Non-Residential Outdoor: 50,977 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	8.00	226	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Site Preparation	Graders	0	8.00	174	0.41
Paving	Pavers	0	8.00	125	0.42
Paving	Rollers	0	8.00	80	0.38
Demolition	Rubber Tired Dozers	0	8.00	255	0.40
Grading	Rubber Tired Dozers	0	8.00	255	0.40

Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Grading	Graders	1	8.00	174	0.41
Paving	Paving Equipment	1	8.00	130	0.36
Site Preparation	Scrapers	0	8.00	361	0.48
Building Construction	Welders	3	8.00	46	0.45
Demolition	Crawler Tractors	1	8.00	208	0.43
Grading	Crawler Tractors	1	8.00	208	0.43
Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Trenchers	1	8.00	80	0.50
Trenching	Plate Compactors	1	8.00	8	0.43

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	201.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	43.00	17.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	9.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.1727	0.0000	2.1727	0.3290	0.0000	0.3290			0.0000			0.0000
Off-Road	1.4051	14.8161	10.6988	0.0202		0.7397	0.7397		0.6964	0.6964		1,940.2431	1,940.2431	0.4734		1,950.1841
Total	**1.4051**	**14.8161**	**10.6988**	**0.0202**	**2.1727**	**0.7397**	**2.9124**	**0.3290**	**0.6964**	**1.0254**		**1,940.2431**	**1,940.2431**	**0.4734**		**1,950.1841**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1565	1.9791	1.7334	7.3800e-003	0.1752	0.0371	0.2122	0.0480	0.0341	0.0821		694.2183	694.2183	5.3900e-003		694.3316
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0255	0.0321	0.4020	1.3600e-003	0.1118	7.6000e-004	0.1125	0.0296	7.1000e-004	0.0304		97.6480	97.6480	4.2000e-003		97.7363
Total	**0.1820**	**2.0112**	**2.1354**	**8.7400e-003**	**0.2869**	**0.0379**	**0.3248**	**0.0776**	**0.0348**	**0.1124**		**791.8664**	**791.8664**	**9.5900e-003**		**792.0679**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.1727	0.0000	2.1727	0.3290	0.0000	0.3290			0.0000			0.0000
Off-Road	1.4051	14.8161	10.6988	0.0202		0.7397	0.7397		0.6964	0.6964	0.0000	1,940.2431	1,940.2431	0.4734		1,950.1841
Total	**1.4051**	**14.8161**	**10.6988**	**0.0202**	**2.1727**	**0.7397**	**2.9124**	**0.3290**	**0.6964**	**1.0254**	**0.0000**	**1,940.2431**	**1,940.2431**	**0.4734**		**1,950.1841**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day										lb/day					
Hauling	0.1565	1.9791	1.7334	7.3800e-003	0.1752	0.0371	0.2122	0.0480	0.0341	0.0821		694.2183	694.2183	5.3900e-003		694.3316
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0255	0.0321	0.4020	1.3600e-003	0.1118	7.6000e-004	0.1125	0.0296	7.1000e-004	0.0304		97.6480	97.6480	4.2000e-003		97.7363
Total	**0.1820**	**2.0112**	**2.1354**	**8.7400e-003**	**0.2869**	**0.0379**	**0.3248**	**0.0776**	**0.0348**	**0.1124**		**791.8664**	**791.8664**	**9.5900e-003**		**792.0679**

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	1.6476	17.9497	10.9983	0.0193		0.8965	0.8965		0.8248	0.8248		1,873.8672	1,873.8672	0.6061		1,886.5942
Total	**1.6476**	**17.9497**	**10.9983**	**0.0193**	**0.5303**	**0.8965**	**1.4268**	**0.0573**	**0.8248**	**0.8820**		**1,873.8672**	**1,873.8672**	**0.6061**		**1,886.5942**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0255	0.0321	0.4020	1.3600e-003	0.1118	7.6000e-004	0.1125	0.0296	7.1000e-004	0.0304		97.6480	97.6480	4.2000e-003		97.7363

Total	**0.0255**	**0.0321**	**0.4020**	**1.3600e-003**	**0.1118**	**7.6000e-004**	**0.1125**	**0.0296**	**7.1000e-004**	**0.0304**		**97.6480**	**97.6480**	**4.2000e-003**		**97.7363**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	1.6476	17.9497	10.9983	0.0193		0.8965	0.8965		0.8248	0.8248	0.0000	1,873.8672	1,873.8672	0.6061		1,886.5942
Total	**1.6476**	**17.9497**	**10.9983**	**0.0193**	**0.5303**	**0.8965**	**1.4268**	**0.0573**	**0.8248**	**0.8820**	**0.0000**	**1,873.8672**	**1,873.8672**	**0.6061**		**1,886.5942**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0255	0.0321	0.4020	1.3600e-003	0.1118	7.6000e-004	0.1125	0.0296	7.1000e-004	0.0304		97.6480	97.6480	4.2000e-003		97.7363
Total	**0.0255**	**0.0321**	**0.4020**	**1.3600e-003**	**0.1118**	**7.6000e-004**	**0.1125**	**0.0296**	**7.1000e-004**	**0.0304**		**97.6480**	**97.6480**	**4.2000e-003**		**97.7363**

3.5 Trenching - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8901	8.3579	7.4688	0.0101		0.5679	0.5679		0.5233	0.5233		970.4456	970.4456	0.3063		976.8777
Total	**0.8901**	**8.3579**	**7.4688**	**0.0101**		**0.5679**	**0.5679**		**0.5233**	**0.5233**		**970.4456**	**970.4456**	**0.3063**		**976.8777**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0255	0.0321	0.4020	1.3600e-003	0.1118	7.6000e-004	0.1125	0.0296	7.1000e-004	0.0304		97.6480	97.6480	4.2000e-003		97.7363
Total	**0.0255**	**0.0321**	**0.4020**	**1.3600e-003**	**0.1118**	**7.6000e-004**	**0.1125**	**0.0296**	**7.1000e-004**	**0.0304**		**97.6480**	**97.6480**	**4.2000e-003**		**97.7363**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	0.8901	8.3579	7.4688	0.0101		0.5679	0.5679		0.5233	0.5233	0.0000	970.4456	970.4456	0.3063		976.8777
Total	**0.8901**	**8.3579**	**7.4688**	**0.0101**		**0.5679**	**0.5679**		**0.5233**	**0.5233**	**0.0000**	**970.4456**	**970.4456**	**0.3063**		**976.8777**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0255	0.0321	0.4020	1.3600e-003	0.1118	7.6000e-004	0.1125	0.0296	7.1000e-004	0.0304		97.6480	97.6480	4.2000e-003		97.7363
Total	**0.0255**	**0.0321**	**0.4020**	**1.3600e-003**	**0.1118**	**7.6000e-004**	**0.1125**	**0.0296**	**7.1000e-004**	**0.0304**		**97.6480**	**97.6480**	**4.2000e-003**		**97.7363**

3.6 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2780	17.3169	14.8514	0.0249		0.9434	0.9434		0.9045	0.9045		2,276.7927	2,276.7927	0.4606		2,286.4660
Total	**2.2780**	**17.3169**	**14.8514**	**0.0249**		**0.9434**	**0.9434**		**0.9045**	**0.9045**		**2,276.7927**	**2,276.7927**	**0.4606**		**2,286.4660**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1114	0.9945	1.3905	3.6700e-003	0.1063	0.0167	0.1230	0.0303	0.0154	0.0456		343.5706	343.5706	2.4900e-003		343.6229
Worker	0.1098	0.1382	1.7287	5.8600e-003	0.4806	3.2900e-003	0.4839	0.1275	3.0500e-003	0.1305		419.8865	419.8865	0.0181		420.2660
Total	**0.2211**	**1.1327**	**3.1193**	**9.5300e-003**	**0.5869**	**0.0200**	**0.6069**	**0.1577**	**0.0184**	**0.1762**		**763.4571**	**763.4571**	**0.0206**		**763.8888**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2780	17.3169	14.8514	0.0249		0.9434	0.9434		0.9045	0.9045	0.0000	2,276.7927	2,276.7927	0.4606		2,286.4660
Total	**2.2780**	**17.3169**	**14.8514**	**0.0249**		**0.9434**	**0.9434**		**0.9045**	**0.9045**	**0.0000**	**2,276.7927**	**2,276.7927**	**0.4606**		**2,286.4660**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1114	0.9945	1.3905	3.6700e-003	0.1063	0.0167	0.1230	0.0303	0.0154	0.0456		343.5706	343.5706	2.4900e-003		343.6229
Worker	0.1098	0.1382	1.7287	5.8600e-003	0.4806	3.2900e-003	0.4839	0.1275	3.0500e-003	0.1305		419.8865	419.8865	0.0181		420.2660
Total	**0.2211**	**1.1327**	**3.1193**	**9.5300e-003**	**0.5869**	**0.0200**	**0.6069**	**0.1577**	**0.0184**	**0.1762**		**763.4571**	**763.4571**	**0.0206**		**763.8888**

3.6 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0361	15.9226	14.5200	0.0249		0.8130	0.8130		0.7792	0.7792		2,276.8416	2,276.8416	0.4464		2,286.2162
Total	**2.0361**	**15.9226**	**14.5200**	**0.0249**		**0.8130**	**0.8130**		**0.7792**	**0.7792**		**2,276.8416**	**2,276.8416**	**0.4464**		**2,286.2162**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1077	0.8441	1.3543	3.6700e-003	0.1063	0.0152	0.1215	0.0303	0.0140	0.0442		343.2839	343.2839	2.5000e-003		343.3365
Worker	0.1044	0.1299	1.6335	5.8700e-003	0.4806	3.3200e-003	0.4840	0.1275	3.0800e-003	0.1305		412.9860	412.9860	0.0173		413.3500

Total	**0.2121**	**0.9740**	**2.9878**	**9.5400e-003**	**0.5869**	**0.0185**	**0.6054**	**0.1577**	**0.0171**	**0.1748**		**756.2699**	**756.2699**	**0.0198**		**756.6865**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0361	15.9226	14.5200	0.0249		0.8130	0.8130		0.7792	0.7792	0.0000	2,276.8416	2,276.8416	0.4464		2,286.2162
Total	**2.0361**	**15.9226**	**14.5200**	**0.0249**		**0.8130**	**0.8130**		**0.7792**	**0.7792**	**0.0000**	**2,276.8416**	**2,276.8416**	**0.4464**		**2,286.2162**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1077	0.8441	1.3543	3.6700e-003	0.1063	0.0152	0.1215	0.0303	0.0140	0.0442		343.2839	343.2839	2.5000e-003		343.3365
Worker	0.1044	0.1299	1.6335	5.8700e-003	0.4806	3.3200e-003	0.4840	0.1275	3.0800e-003	0.1305		412.9860	412.9860	0.0173		413.3500
Total	**0.2121**	**0.9740**	**2.9878**	**9.5400e-003**	**0.5869**	**0.0185**	**0.6054**	**0.1577**	**0.0171**	**0.1748**		**756.2699**	**756.2699**	**0.0198**		**756.6865**

3.7 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2479	2.2791	2.8113	4.7200e-003		0.1087	0.1087		0.1011	0.1011		438.9954	438.9954	0.1309		441.7440
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2479**	**2.2791**	**2.8113**	**4.7200e-003**		**0.1087**	**0.1087**		**0.1011**	**0.1011**		**438.9954**	**438.9954**	**0.1309**		**441.7440**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0121	0.0151	0.1899	6.8000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.6000e-004	0.0152		48.0216	48.0216	2.0200e-003		48.0640
Total	**0.0121**	**0.0151**	**0.1899**	**6.8000e-004**	**0.0559**	**3.9000e-004**	**0.0563**	**0.0148**	**3.6000e-004**	**0.0152**		**48.0216**	**48.0216**	**2.0200e-003**		**48.0640**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	0.2479	2.2791	2.8113	4.7200e-003		0.1087	0.1087		0.1011	0.1011	0.0000	438.9954	438.9954	0.1309		441.7440
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2479**	**2.2791**	**2.8113**	**4.7200e-003**		**0.1087**	**0.1087**		**0.1011**	**0.1011**	**0.0000**	**438.9954**	**438.9954**	**0.1309**		**441.7440**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0121	0.0151	0.1899	6.8000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.6000e-004	0.0152		48.0216	48.0216	2.0200e-003		48.0640
Total	**0.0121**	**0.0151**	**0.1899**	**6.8000e-004**	**0.0559**	**3.9000e-004**	**0.0563**	**0.0148**	**3.6000e-004**	**0.0152**		**48.0216**	**48.0216**	**2.0200e-003**		**48.0640**

3.8 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	47.2557					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.8537
Total	**47.4746**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.8537**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0219	0.0272	0.3419	1.2300e-003	0.1006	6.9000e-004	0.1013	0.0267	6.4000e-004	0.0273		86.4389	86.4389	3.6300e-003		86.5151
Total	**0.0219**	**0.0272**	**0.3419**	**1.2300e-003**	**0.1006**	**6.9000e-004**	**0.1013**	**0.0267**	**6.4000e-004**	**0.0273**		**86.4389**	**86.4389**	**3.6300e-003**		**86.5151**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	47.2557					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.8537
Total	**47.4746**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.8537**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000	
Worker	0.0219	0.0272	0.3419	1.2300e-003	0.1006	6.9000e-004	0.1013	0.0267	6.4000e-004	0.0273		86.4389	86.4389	3.6300e-003		86.5151	
Total	**0.0219**	**0.0272**	**0.3419**	**1.2300e-003**	**0.1006**	**6.9000e-004**	**0.1013**	**0.0267**	**6.4000e-004**	**0.0273**		**86.4389**	**86.4389**	**3.6300e-003**		**86.5151**	

Business/Social Science/Admin Office Building

Orange County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	101.95	1000sqft	2.34	101,954.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment -

Off-road Equipment - modified

Off-road Equipment -

Grading - modified

Demolition -

Architectural Coating - modified

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	3.00	1.00
tblConstructionPhase	PhaseEndDate	2/26/2015	6/26/2020
tblConstructionPhase	PhaseStartDate	1/30/2015	6/1/2020
tblGrading	AcresOfGrading	6.00	3.00
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.50	0.50
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Trenchers
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2021

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2020	2.5145	18.4846	18.1945	0.0341	2.4596	0.9635	3.2373	0.4066	0.9230	1.1379	0.0000	3,015.0195	3,015.0195	0.6103	0.0000	3,027.8348
2021	47.4975	16.9274	17.7315	0.0341	0.5869	0.8316	1.4185	0.1577	0.7963	0.9541	0.0000	3,008.2281	3,008.2281	0.4663	0.0000	3,018.0212
Total	**50.0120**	**35.4120**	**35.9260**	**0.0682**	**3.0465**	**1.7951**	**4.6558**	**0.5643**	**1.7193**	**2.0919**	**0.0000**	**6,023.2476**	**6,023.2476**	**1.0766**	**0.0000**	**6,045.8559**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2020	2.5145	18.4846	18.1945	0.0341	2.4596	0.9635	3.2373	0.4066	0.9230	1.1379	0.0000	3,015.0195	3,015.0195	0.6103	0.0000	3,027.8348
2021	47.4975	16.9274	17.7315	0.0341	0.5869	0.8316	1.4185	0.1577	0.7963	0.9541	0.0000	3,008.2281	3,008.2281	0.4663	0.0000	3,018.0211
Total	**50.0120**	**35.4120**	**35.9260**	**0.0682**	**3.0465**	**1.7951**	**4.6558**	**0.5643**	**1.7193**	**2.0919**	**0.0000**	**6,023.2476**	**6,023.2476**	**1.0766**	**0.0000**	**6,045.8559**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/29/2015	1/29/2015	5	1	
2	Demolition	Demolition	6/1/2020	6/26/2020	5	20	
3	Grading	Grading	6/27/2020	7/6/2020	5	6	
4	Trenching	Trenching	7/7/2020	7/20/2020	5	10	
5	Building Construction	Building Construction	7/21/2020	5/24/2021	5	220	
6	Paving	Paving	5/25/2021	6/7/2021	5	10	
7	Architectural Coating	Architectural Coating	6/8/2021	7/5/2021	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 3

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 152,931; Non-Residential Outdoor: 50,977 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	8.00	226	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Site Preparation	Graders	0	8.00	174	0.41
Paving	Pavers	0	8.00	125	0.42
Paving	Rollers	0	8.00	80	0.38
Demolition	Rubber Tired Dozers	0	8.00	255	0.40
Grading	Rubber Tired Dozers	0	8.00	255	0.40

Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Grading	Graders	1	8.00	174	0.41
Paving	Paving Equipment	1	8.00	130	0.36
Site Preparation	Scrapers	0	8.00	361	0.48
Building Construction	Welders	3	8.00	46	0.45
Demolition	Crawler Tractors	1	8.00	208	0.43
Grading	Crawler Tractors	1	8.00	208	0.43
Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Trenchers	1	8.00	80	0.50
Trenching	Plate Compactors	1	8.00	8	0.43

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	201.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	43.00	17.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	9.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.1727	0.0000	2.1727	0.3290	0.0000	0.3290			0.0000			0.0000
Off-Road	1.4051	14.8161	10.6988	0.0202		0.7397	0.7397		0.6964	0.6964		1,940.2431	1,940.2431	0.4734		1,950.1841
Total	**1.4051**	**14.8161**	**10.6988**	**0.0202**	**2.1727**	**0.7397**	**2.9124**	**0.3290**	**0.6964**	**1.0254**		**1,940.2431**	**1,940.2431**	**0.4734**		**1,950.1841**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1638	2.0462	2.0365	7.3700e-003	0.1752	0.0372	0.2123	0.0480	0.0342	0.0822		692.5628	692.5628	5.4700e-003		692.6778
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0268	0.0353	0.3748	1.2900e-003	0.1118	7.6000e-004	0.1125	0.0296	7.1000e-004	0.0304		92.4588	92.4588	4.2000e-003		92.5470
Total	**0.1906**	**2.0815**	**2.4113**	**8.6600e-003**	**0.2869**	**0.0379**	**0.3249**	**0.0776**	**0.0349**	**0.1125**		**785.0216**	**785.0216**	**9.6700e-003**		**785.2248**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.1727	0.0000	2.1727	0.3290	0.0000	0.3290			0.0000			0.0000
Off-Road	1.4051	14.8161	10.6988	0.0202		0.7397	0.7397		0.6964	0.6964	0.0000	1,940.2431	1,940.2431	0.4734		1,950.1841
Total	**1.4051**	**14.8161**	**10.6988**	**0.0202**	**2.1727**	**0.7397**	**2.9124**	**0.3290**	**0.6964**	**1.0254**	**0.0000**	**1,940.2431**	**1,940.2431**	**0.4734**		**1,950.1841**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day				
Hauling	0.1638	2.0462	2.0365	7.3700e-003	0.1752	0.0372	0.2123	0.0480	0.0342	0.0822		692.5628	692.5628	5.4700e-003		692.6778
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0268	0.0353	0.3748	1.2900e-003	0.1118	7.6000e-004	0.1125	0.0296	7.1000e-004	0.0304		92.4588	92.4588	4.2000e-003		92.5470
Total	**0.1906**	**2.0815**	**2.4113**	**8.6600e-003**	**0.2869**	**0.0379**	**0.3249**	**0.0776**	**0.0349**	**0.1125**		**785.0216**	**785.0216**	**9.6700e-003**		**785.2248**

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	1.6476	17.9497	10.9983	0.0193		0.8965	0.8965		0.8248	0.8248		1,873.8672	1,873.8672	0.6061		1,886.5942
Total	**1.6476**	**17.9497**	**10.9983**	**0.0193**	**0.5303**	**0.8965**	**1.4268**	**0.0573**	**0.8248**	**0.8820**		**1,873.8672**	**1,873.8672**	**0.6061**		**1,886.5942**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0268	0.0353	0.3748	1.2900e-003	0.1118	7.6000e-004	0.1125	0.0296	7.1000e-004	0.0304		92.4588	92.4588	4.2000e-003		92.5470

Total	**0.0268**	**0.0353**	**0.3748**	**1.2900e-003**	**0.1118**	**7.6000e-004**	**0.1125**	**0.0296**	**7.1000e-004**	**0.0304**		**92.4588**	**92.4588**	**4.2000e-003**		**92.5470**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	1.6476	17.9497	10.9983	0.0193		0.8965	0.8965		0.8248	0.8248	0.0000	1,873.8672	1,873.8672	0.6061		1,886.5942
Total	**1.6476**	**17.9497**	**10.9983**	**0.0193**	**0.5303**	**0.8965**	**1.4268**	**0.0573**	**0.8248**	**0.8820**	**0.0000**	**1,873.8672**	**1,873.8672**	**0.6061**		**1,886.5942**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0268	0.0353	0.3748	1.2900e-003	0.1118	7.6000e-004	0.1125	0.0296	7.1000e-004	0.0304		92.4588	92.4588	4.2000e-003		92.5470
Total	**0.0268**	**0.0353**	**0.3748**	**1.2900e-003**	**0.1118**	**7.6000e-004**	**0.1125**	**0.0296**	**7.1000e-004**	**0.0304**		**92.4588**	**92.4588**	**4.2000e-003**		**92.5470**

3.5 Trenching - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8901	8.3579	7.4688	0.0101		0.5679	0.5679		0.5233	0.5233		970.4456	970.4456	0.3063		976.8777
Total	**0.8901**	**8.3579**	**7.4688**	**0.0101**		**0.5679**	**0.5679**		**0.5233**	**0.5233**		**970.4456**	**970.4456**	**0.3063**		**976.8777**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0268	0.0353	0.3748	1.2900e-003	0.1118	7.6000e-004	0.1125	0.0296	7.1000e-004	0.0304		92.4588	92.4588	4.2000e-003		92.5470
Total	**0.0268**	**0.0353**	**0.3748**	**1.2900e-003**	**0.1118**	**7.6000e-004**	**0.1125**	**0.0296**	**7.1000e-004**	**0.0304**		**92.4588**	**92.4588**	**4.2000e-003**		**92.5470**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	0.8901	8.3579	7.4688	0.0101		0.5679	0.5679		0.5233	0.5233	0.0000	970.4456	970.4456	0.3063		976.8777
Total	**0.8901**	**8.3579**	**7.4688**	**0.0101**		**0.5679**	**0.5679**		**0.5233**	**0.5233**	**0.0000**	**970.4456**	**970.4456**	**0.3063**		**976.8777**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0268	0.0353	0.3748	1.2900e-003	0.1118	7.6000e-004	0.1125	0.0296	7.1000e-004	0.0304		92.4588	92.4588	4.2000e-003		92.5470
Total	**0.0268**	**0.0353**	**0.3748**	**1.2900e-003**	**0.1118**	**7.6000e-004**	**0.1125**	**0.0296**	**7.1000e-004**	**0.0304**		**92.4588**	**92.4588**	**4.2000e-003**		**92.5470**

3.6 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2780	17.3169	14.8514	0.0249		0.9434	0.9434		0.9045	0.9045		2,276.7927	2,276.7927	0.4606		2,286.4660
Total	**2.2780**	**17.3169**	**14.8514**	**0.0249**		**0.9434**	**0.9434**		**0.9045**	**0.9045**		**2,276.7927**	**2,276.7927**	**0.4606**		**2,286.4660**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1214	1.0157	1.7314	3.6400e-003	0.1063	0.0169	0.1231	0.0303	0.0155	0.0458		340.6541	340.6541	2.5700e-003		340.7082
Worker	0.1151	0.1519	1.6117	5.5500e-003	0.4806	3.2900e-003	0.4839	0.1275	3.0500e-003	0.1305		397.5727	397.5727	0.0181		397.9522
Total	**0.2364**	**1.1677**	**3.3431**	**9.1900e-003**	**0.5869**	**0.0201**	**0.6071**	**0.1577**	**0.0186**	**0.1763**		**738.2268**	**738.2268**	**0.0206**		**738.6604**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2780	17.3169	14.8514	0.0249		0.9434	0.9434		0.9045	0.9045	0.0000	2,276.7927	2,276.7927	0.4606		2,286.4660
Total	**2.2780**	**17.3169**	**14.8514**	**0.0249**		**0.9434**	**0.9434**		**0.9045**	**0.9045**	**0.0000**	**2,276.7927**	**2,276.7927**	**0.4606**		**2,286.4660**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1214	1.0157	1.7314	3.6400e-003	0.1063	0.0169	0.1231	0.0303	0.0155	0.0458		340.6541	340.6541	2.5700e-003		340.7082
Worker	0.1151	0.1519	1.6117	5.5500e-003	0.4806	3.2900e-003	0.4839	0.1275	3.0500e-003	0.1305		397.5727	397.5727	0.0181		397.9522
Total	**0.2364**	**1.1677**	**3.3431**	**9.1900e-003**	**0.5869**	**0.0201**	**0.6071**	**0.1577**	**0.0186**	**0.1763**		**738.2268**	**738.2268**	**0.0206**		**738.6604**

3.6 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0361	15.9226	14.5200	0.0249		0.8130	0.8130		0.7792	0.7792		2,276.8416	2,276.8416	0.4464		2,286.2162
Total	**2.0361**	**15.9226**	**14.5200**	**0.0249**		**0.8130**	**0.8130**		**0.7792**	**0.7792**		**2,276.8416**	**2,276.8416**	**0.4464**		**2,286.2162**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1172	0.8622	1.6909	3.6400e-003	0.1063	0.0153	0.1216	0.0303	0.0141	0.0444		340.3671	340.3671	2.5900e-003		340.4216
Worker	0.1094	0.1427	1.5206	5.5500e-003	0.4806	3.3200e-003	0.4840	0.1275	3.0800e-003	0.1305		391.0194	391.0194	0.0173		391.3834

Total	**0.2266**	**1.0048**	**3.2115**	**9.1900e-003**	**0.5869**	**0.0186**	**0.6056**	**0.1577**	**0.0172**	**0.1749**		**731.3865**	**731.3865**	**0.0199**		**731.8049**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0361	15.9226	14.5200	0.0249		0.8130	0.8130		0.7792	0.7792	0.0000	2,276.8416	2,276.8416	0.4464		2,286.2162
Total	**2.0361**	**15.9226**	**14.5200**	**0.0249**		**0.8130**	**0.8130**		**0.7792**	**0.7792**	**0.0000**	**2,276.8416**	**2,276.8416**	**0.4464**		**2,286.2162**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1172	0.8622	1.6909	3.6400e-003	0.1063	0.0153	0.1216	0.0303	0.0141	0.0444		340.3671	340.3671	2.5900e-003		340.4216
Worker	0.1094	0.1427	1.5206	5.5500e-003	0.4806	3.3200e-003	0.4840	0.1275	3.0800e-003	0.1305		391.0194	391.0194	0.0173		391.3834
Total	**0.2266**	**1.0048**	**3.2115**	**9.1900e-003**	**0.5869**	**0.0186**	**0.6056**	**0.1577**	**0.0172**	**0.1749**		**731.3865**	**731.3865**	**0.0199**		**731.8049**

3.7 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2479	2.2791	2.8113	4.7200e-003		0.1087	0.1087		0.1011	0.1011		438.9954	438.9954	0.1309		441.7440
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2479**	**2.2791**	**2.8113**	**4.7200e-003**		**0.1087**	**0.1087**		**0.1011**	**0.1011**		**438.9954**	**438.9954**	**0.1309**		**441.7440**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0127	0.0166	0.1768	6.5000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.6000e-004	0.0152		45.4674	45.4674	2.0200e-003		45.5097
Total	**0.0127**	**0.0166**	**0.1768**	**6.5000e-004**	**0.0559**	**3.9000e-004**	**0.0563**	**0.0148**	**3.6000e-004**	**0.0152**		**45.4674**	**45.4674**	**2.0200e-003**		**45.5097**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	0.2479	2.2791	2.8113	4.7200e-003		0.1087	0.1087		0.1011	0.1011	0.0000	438.9954	438.9954	0.1309		441.7440
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2479**	**2.2791**	**2.8113**	**4.7200e-003**		**0.1087**	**0.1087**		**0.1011**	**0.1011**	**0.0000**	**438.9954**	**438.9954**	**0.1309**		**441.7440**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0127	0.0166	0.1768	6.5000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.6000e-004	0.0152		45.4674	45.4674	2.0200e-003		45.5097
Total	**0.0127**	**0.0166**	**0.1768**	**6.5000e-004**	**0.0559**	**3.9000e-004**	**0.0563**	**0.0148**	**3.6000e-004**	**0.0152**		**45.4674**	**45.4674**	**2.0200e-003**		**45.5097**

3.8 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	47.2557					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.8537
Total	**47.4746**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.8537**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0229	0.0299	0.3183	1.1600e-003	0.1006	6.9000e-004	0.1013	0.0267	6.4000e-004	0.0273		81.8413	81.8413	3.6300e-003		81.9175
Total	**0.0229**	**0.0299**	**0.3183**	**1.1600e-003**	**0.1006**	**6.9000e-004**	**0.1013**	**0.0267**	**6.4000e-004**	**0.0273**		**81.8413**	**81.8413**	**3.6300e-003**		**81.9175**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	47.2557					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.8537
Total	**47.4746**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.8537**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0229	0.0299	0.3183	1.1600e-003	0.1006	6.9000e-004	0.1013	0.0267	6.4000e-004	0.0273		81.8413	81.8413	3.6300e-003		81.9175
Total	**0.0229**	**0.0299**	**0.3183**	**1.1600e-003**	**0.1006**	**6.9000e-004**	**0.1013**	**0.0267**	**6.4000e-004**	**0.0273**		**81.8413**	**81.8413**	**3.6300e-003**		**81.9175**

Central Warehouse Corp Yard Expansion

Orange County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	31.55	1000sqft	0.72	31,552.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - modified

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Demolition - modified

Grading - modified

Architectural Coating - modified

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	PhaseEndDate	1/29/2015	2/4/2022
tblConstructionPhase	PhaseStartDate	1/16/2015	1/22/2022
tblGrading	AcresOfGrading	1.00	0.72
tblLandUse	LandUseSquareFeet	31,550.00	31,552.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2022

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

2022	0.1972	0.4944	0.5342	9.9000e-004	0.0338	0.0250	0.0588	6.5000e-003	0.0231	0.0296	0.0000	83.4572	83.4572	0.0205	0.0000	83.8881
Total	**0.1972**	**0.4944**	**0.5342**	**9.9000e-004**	**0.0338**	**0.0250**	**0.0588**	**6.5000e-003**	**0.0231**	**0.0296**	**0.0000**	**83.4572**	**83.4572**	**0.0205**	**0.0000**	**83.8881**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2022	0.1972	0.4944	0.5342	9.9000e-004	0.0217	0.0250	0.0468	4.6900e-003	0.0231	0.0278	0.0000	83.4571	83.4571	0.0205	0.0000	83.8880
Total	**0.1972**	**0.4944**	**0.5342**	**9.9000e-004**	**0.0217**	**0.0250**	**0.0468**	**4.6900e-003**	**0.0231**	**0.0278**	**0.0000**	**83.4571**	**83.4571**	**0.0205**	**0.0000**	**83.8880**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**35.62**	**0.00**	**20.47**	**27.85**	**0.00**	**6.11**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/15/2015	1/15/2015	5	1	
2	Demolition	Demolition	1/22/2022	2/4/2022	5	10	
3	Grading	Grading	2/5/2022	2/8/2022	5	2	
4	Trenching	Trenching	2/9/2022	2/22/2022	5	10	
5	Building Construction	Building Construction	2/23/2022	7/12/2022	5	100	

6	Paving	Paving	7/13/2022	7/19/2022	5	5	
7	Architectural Coating	Architectural Coating	7/20/2022	8/2/2022	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0.72

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 47,328; Non-Residential Outdoor: 15,776 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	0	8.00	174	0.41
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Crawler Tractors	1	8.00	208	0.43
Demolition	Rubber Tired Dozers	0	1.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Crawler Tractors	1	8.00	208	0.43
Grading	Rubber Tired Dozers	0	1.00	255	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Trenching	Plate Compactors	1	8.00	8	0.43
Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Trenchers	1	8.00	80	0.50
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	0	7.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	0	7.00	80	0.38

Paving	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	10.00	0.00	199.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	13.00	5.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Clean Paved Roads

3.2 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0215	0.0000	0.0215	3.2500e-003	0.0000	3.2500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.4400e-003	0.0561	0.0465	9.0000e-005		2.5400e-003	2.5400e-003		2.4000e-003	2.4000e-003	0.0000	8.1158	8.1158	1.9000e-003	0.0000	8.1558
Total	**5.4400e-003**	**0.0561**	**0.0465**	**9.0000e-005**	**0.0215**	**2.5400e-003**	**0.0240**	**3.2500e-003**	**2.4000e-003**	**5.6500e-003**	**0.0000**	**8.1158**	**8.1158**	**1.9000e-003**	**0.0000**	**8.1558**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.5900e-003	0.0165	0.0191	7.0000e-005	1.7100e-003	3.6000e-004	2.0700e-003	4.7000e-004	3.3000e-004	8.0000e-004	0.0000	6.2178	6.2178	5.0000e-005	0.0000	6.2189
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	1.6000e-004	1.7100e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4119	0.4119	2.0000e-005	0.0000	0.4123

Total	**1.7000e-003**	**0.0166**	**0.0208**	**8.0000e-005**	**2.2600e-003**	**3.6000e-004**	**2.6200e-003**	**6.2000e-004**	**3.3000e-004**	**9.5000e-004**	**0.0000**	**6.6297**	**6.6297**	**7.0000e-005**	**0.0000**	**6.6311**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					9.6700e-003	0.0000	9.6700e-003	1.4600e-003	0.0000	1.4600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.4400e-003	0.0561	0.0465	9.0000e-005		2.5400e-003	2.5400e-003		2.4000e-003	2.4000e-003	0.0000	8.1158	8.1158	1.9000e-003	0.0000	8.1558
Total	**5.4400e-003**	**0.0561**	**0.0465**	**9.0000e-005**	**9.6700e-003**	**2.5400e-003**	**0.0122**	**1.4600e-003**	**2.4000e-003**	**3.8600e-003**	**0.0000**	**8.1158**	**8.1158**	**1.9000e-003**	**0.0000**	**8.1558**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.5900e-003	0.0165	0.0191	7.0000e-005	1.7100e-003	3.6000e-004	2.0700e-003	4.7000e-004	3.3000e-004	8.0000e-004	0.0000	6.2178	6.2178	5.0000e-005	0.0000	6.2189
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	1.6000e-004	1.7100e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4119	0.4119	2.0000e-005	0.0000	0.4123
Total	**1.7000e-003**	**0.0166**	**0.0208**	**8.0000e-005**	**2.2600e-003**	**3.6000e-004**	**2.6200e-003**	**6.2000e-004**	**3.3000e-004**	**9.5000e-004**	**0.0000**	**6.6297**	**6.6297**	**7.0000e-005**	**0.0000**	**6.6311**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.8000e-004	0.0000	3.8000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0900e-003	0.0112	9.2900e-003	2.0000e-005		5.1000e-004	5.1000e-004		4.8000e-004	4.8000e-004	0.0000	1.6232	1.6232	3.8000e-004	0.0000	1.6312
Total	**1.0900e-003**	**0.0112**	**9.2900e-003**	**2.0000e-005**	**3.8000e-004**	**5.1000e-004**	**8.9000e-004**	**4.0000e-005**	**4.8000e-004**	**5.2000e-004**	**0.0000**	**1.6232**	**1.6232**	**3.8000e-004**	**0.0000**	**1.6312**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	3.0000e-005	3.4000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0824	0.0824	0.0000	0.0000	0.0825
Total	**2.0000e-005**	**3.0000e-005**	**3.4000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0824**	**0.0824**	**0.0000**	**0.0000**	**0.0825**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Fugitive Dust					1.7000e-004	0.0000	1.7000e-004	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0900e-003	0.0112	9.2900e-003	2.0000e-005		5.1000e-004	5.1000e-004		4.8000e-004	4.8000e-004	0.0000	1.6232	1.6232	3.8000e-004	0.0000	1.6312
Total	**1.0900e-003**	**0.0112**	**9.2900e-003**	**2.0000e-005**	**1.7000e-004**	**5.1000e-004**	**6.8000e-004**	**2.0000e-005**	**4.8000e-004**	**5.0000e-004**	**0.0000**	**1.6232**	**1.6232**	**3.8000e-004**	**0.0000**	**1.6312**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	3.0000e-005	3.4000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0824	0.0824	0.0000	0.0000	0.0825
Total	**2.0000e-005**	**3.0000e-005**	**3.4000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0824**	**0.0824**	**0.0000**	**0.0000**	**0.0825**

3.5 Trenching - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.7100e-003	0.0353	0.0368	5.0000e-005		2.1800e-003	2.1800e-003		2.0100e-003	2.0100e-003	0.0000	4.4102	4.4102	1.3900e-003	0.0000	4.4395
Total	**3.7100e-003**	**0.0353**	**0.0368**	**5.0000e-005**		**2.1800e-003**	**2.1800e-003**		**2.0100e-003**	**2.0100e-003**	**0.0000**	**4.4102**	**4.4102**	**1.3900e-003**	**0.0000**	**4.4395**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	1.6000e-004	1.7100e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4119	0.4119	2.0000e-005	0.0000	0.4123
Total	**1.1000e-004**	**1.6000e-004**	**1.7100e-003**	**1.0000e-005**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4119**	**0.4119**	**2.0000e-005**	**0.0000**	**0.4123**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.7100e-003	0.0353	0.0368	5.0000e-005		2.1800e-003	2.1800e-003		2.0100e-003	2.0100e-003	0.0000	4.4102	4.4102	1.3900e-003	0.0000	4.4395
Total	**3.7100e-003**	**0.0353**	**0.0368**	**5.0000e-005**		**2.1800e-003**	**2.1800e-003**		**2.0100e-003**	**2.0100e-003**	**0.0000**	**4.4102**	**4.4102**	**1.3900e-003**	**0.0000**	**4.4395**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	1.6000e-004	1.7100e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4119	0.4119	2.0000e-005	0.0000	0.4123
Total	**1.1000e-004**	**1.6000e-004**	**1.7100e-003**	**1.0000e-005**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4119**	**0.4119**	**2.0000e-005**	**0.0000**	**0.4123**

3.6 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0341	0.3490	0.3566	5.7000e-004		0.0185	0.0185		0.0170	0.0170	0.0000	49.7995	49.7995	0.0161	0.0000	50.1377
Total	**0.0341**	**0.3490**	**0.3566**	**5.7000e-004**		**0.0185**	**0.0185**		**0.0170**	**0.0170**	**0.0000**	**49.7995**	**49.7995**	**0.0161**	**0.0000**	**50.1377**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6300e-003	0.0117	0.0231	5.0000e-005	1.5400e-003	2.2000e-004	1.7600e-003	4.4000e-004	2.0000e-004	6.4000e-004	0.0000	4.5596	4.5596	3.0000e-005	0.0000	4.5603
Worker	1.4700e-003	2.0900e-003	0.0223	9.0000e-005	7.1400e-003	5.0000e-005	7.1900e-003	1.8900e-003	5.0000e-005	1.9400e-003	0.0000	5.3547	5.3547	2.3000e-004	0.0000	5.3595

Total	**3.1000e-003**	**0.0138**	**0.0453**	**1.4000e-004**	**8.6800e-003**	**2.7000e-004**	**8.9500e-003**	**2.3300e-003**	**2.5000e-004**	**2.5800e-003**	**0.0000**	**9.9143**	**9.9143**	**2.6000e-004**	**0.0000**	**9.9198**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0341	0.3490	0.3566	5.7000e-004		0.0185	0.0185		0.0170	0.0170	0.0000	49.7995	49.7995	0.0161	0.0000	50.1377
Total	**0.0341**	**0.3490**	**0.3566**	**5.7000e-004**		**0.0185**	**0.0185**		**0.0170**	**0.0170**	**0.0000**	**49.7995**	**49.7995**	**0.0161**	**0.0000**	**50.1377**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6300e-003	0.0117	0.0231	5.0000e-005	1.5400e-003	2.2000e-004	1.7600e-003	4.4000e-004	2.0000e-004	6.4000e-004	0.0000	4.5596	4.5596	3.0000e-005	0.0000	4.5603
Worker	1.4700e-003	2.0900e-003	0.0223	9.0000e-005	7.1400e-003	5.0000e-005	7.1900e-003	1.8900e-003	5.0000e-005	1.9400e-003	0.0000	5.3547	5.3547	2.3000e-004	0.0000	5.3595
Total	**3.1000e-003**	**0.0138**	**0.0453**	**1.4000e-004**	**8.6800e-003**	**2.7000e-004**	**8.9500e-003**	**2.3300e-003**	**2.5000e-004**	**2.5800e-003**	**0.0000**	**9.9143**	**9.9143**	**2.6000e-004**	**0.0000**	**9.9198**

3.7 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.5000e-004	4.9700e-003	6.8500e-003	1.0000e-005		2.4000e-004	2.4000e-004		2.2000e-004	2.2000e-004	0.0000	0.9670	0.9670	2.9000e-004	0.0000	0.9732
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.5000e-004**	**4.9700e-003**	**6.8500e-003**	**1.0000e-005**		**2.4000e-004**	**2.4000e-004**		**2.2000e-004**	**2.2000e-004**	**0.0000**	**0.9670**	**0.9670**	**2.9000e-004**	**0.0000**	**0.9732**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	4.0000e-005	4.3000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1030	0.1030	0.0000	0.0000	0.1031
Total	**3.0000e-005**	**4.0000e-005**	**4.3000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**1.4000e-004**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**0.0000**	**0.1030**	**0.1030**	**0.0000**	**0.0000**	**0.1031**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Off-Road	5.5000e-004	4.9700e-003	6.8500e-003	1.0000e-005		2.4000e-004	2.4000e-004		2.2000e-004	2.2000e-004	0.0000	0.9670	0.9670	2.9000e-004	0.0000	0.9732
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.5000e-004**	**4.9700e-003**	**6.8500e-003**	**1.0000e-005**		**2.4000e-004**	**2.4000e-004**		**2.2000e-004**	**2.2000e-004**	**0.0000**	**0.9670**	**0.9670**	**2.9000e-004**	**0.0000**	**0.9732**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	4.0000e-005	4.3000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1030	0.1030	0.0000	0.0000	0.1031
Total	**3.0000e-005**	**4.0000e-005**	**4.3000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**1.4000e-004**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**0.0000**	**0.1030**	**0.1030**	**0.0000**	**0.0000**	**0.1031**

3.8 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1462					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0200e-003	7.0400e-003	9.0700e-003	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2784
Total	**0.1473**	**7.0400e-003**	**9.0700e-003**	**1.0000e-005**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2784**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	5.0000e-005	5.1000e-004	0.0000	1.6000e-004	0.0000	1.7000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1236	0.1236	1.0000e-005	0.0000	0.1237
Total	**3.0000e-005**	**5.0000e-005**	**5.1000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**1.7000e-004**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**0.0000**	**0.1236**	**0.1236**	**1.0000e-005**	**0.0000**	**0.1237**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1462					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0200e-003	7.0400e-003	9.0700e-003	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2784
Total	**0.1473**	**7.0400e-003**	**9.0700e-003**	**1.0000e-005**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2784**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	5.0000e-005	5.1000e-004	0.0000	1.6000e-004	0.0000	1.7000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1236	0.1236	1.0000e-005	0.0000	0.1237
Total	**3.0000e-005**	**5.0000e-005**	**5.1000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**1.7000e-004**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**0.0000**	**0.1236**	**0.1236**	**1.0000e-005**	**0.0000**	**0.1237**

Central Warehouse Corp Yard Expansion

Orange County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	31.55	1000sqft	0.72	31,552.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - modified

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Demolition - modified

Grading - modified

Architectural Coating - modified

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	PhaseEndDate	1/29/2015	2/4/2022
tblConstructionPhase	PhaseStartDate	1/16/2015	1/22/2022
tblGrading	AcresOfGrading	1.00	0.72
tblLandUse	LandUseSquareFeet	31,550.00	31,552.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2022

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

2022	29.4602	14.3701	13.0364	0.0346	4.7577	0.5805	5.3382	0.7755	0.5461	1.3216	0.0000	3,255.8824	3,255.8824	0.4343	0.0000	3,265.0025
Total	**29.4602**	**14.3701**	**13.0364**	**0.0346**	**4.7577**	**0.5805**	**5.3382**	**0.7755**	**0.5461**	**1.3216**	**0.0000**	**3,255.8824**	**3,255.8824**	**0.4343**	**0.0000**	**3,265.0025**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2022	29.4602	14.3701	13.0364	0.0346	2.3932	0.5805	2.9737	0.4175	0.5461	0.9636	0.0000	3,255.8824	3,255.8824	0.4343	0.0000	3,265.0025
Total	**29.4602**	**14.3701**	**13.0364**	**0.0346**	**2.3932**	**0.5805**	**2.9737**	**0.4175**	**0.5461**	**0.9636**	**0.0000**	**3,255.8824**	**3,255.8824**	**0.4343**	**0.0000**	**3,265.0025**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**49.70**	**0.00**	**44.29**	**46.16**	**0.00**	**27.09**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/15/2015	1/15/2015	5	1	
2	Demolition	Demolition	1/22/2022	2/4/2022	5	10	
3	Grading	Grading	2/5/2022	2/8/2022	5	2	
4	Trenching	Trenching	2/9/2022	2/22/2022	5	10	
5	Building Construction	Building Construction	2/23/2022	7/12/2022	5	100	

6	Paving	Paving	7/13/2022	7/19/2022	5	5	
7	Architectural Coating	Architectural Coating	7/20/2022	8/2/2022	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0.72

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 47,328; Non-Residential Outdoor: 15,776 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	0	8.00	174	0.41
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Crawler Tractors	1	8.00	208	0.43
Demolition	Rubber Tired Dozers	0	1.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Crawler Tractors	1	8.00	208	0.43
Grading	Rubber Tired Dozers	0	1.00	255	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Trenching	Plate Compactors	1	8.00	8	0.43
Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Trenchers	1	8.00	80	0.50
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	0	7.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	0	7.00	80	0.38

Paving	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	10.00	0.00	199.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	13.00	5.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Clean Paved Roads

3.2 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.2991	0.0000	4.2991	0.6509	0.0000	0.6509			0.0000			0.0000
Off-Road	1.0874	11.2091	9.2927	0.0186		0.5078	0.5078		0.4792	0.4792		1,789.2341	1,789.2341	0.4193		1,798.0399
Total	**1.0874**	**11.2091**	**9.2927**	**0.0186**	**4.2991**	**0.5078**	**4.8069**	**0.6509**	**0.4792**	**1.1301**		**1,789.2341**	**1,789.2341**	**0.4193**		**1,798.0399**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3088	3.1325	3.3840	0.0146	0.3468	0.0720	0.4188	0.0950	0.0662	0.1612		1,372.1662	1,372.1662	0.0111		1,372.3992
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0231	0.0285	0.3597	1.3600e-003	0.1118	7.8000e-004	0.1126	0.0296	7.2000e-004	0.0304		94.4821	94.4821	3.8800e-003		94.5635

Total	**0.3320**	**3.1610**	**3.7437**	**0.0160**	**0.4586**	**0.0727**	**0.5314**	**0.1246**	**0.0669**	**0.1915**		**1,466.6483**	**1,466.6483**	**0.0150**		**1,466.9627**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.9346	0.0000	1.9346	0.2929	0.0000	0.2929			0.0000			0.0000
Off-Road	1.0874	11.2091	9.2927	0.0186		0.5078	0.5078		0.4792	0.4792	0.0000	1,789.2341	1,789.2341	0.4193		1,798.0399
Total	**1.0874**	**11.2091**	**9.2927**	**0.0186**	**1.9346**	**0.5078**	**2.4424**	**0.2929**	**0.4792**	**0.7721**	**0.0000**	**1,789.2341**	**1,789.2341**	**0.4193**		**1,798.0399**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3088	3.1325	3.3840	0.0146	0.3468	0.0720	0.4188	0.0950	0.0662	0.1612		1,372.1662	1,372.1662	0.0111		1,372.3992
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0231	0.0285	0.3597	1.3600e-003	0.1118	7.8000e-004	0.1126	0.0296	7.2000e-004	0.0304		94.4821	94.4821	3.8800e-003		94.5635
Total	**0.3320**	**3.1610**	**3.7437**	**0.0160**	**0.4586**	**0.0727**	**0.5314**	**0.1246**	**0.0669**	**0.1915**		**1,466.6483**	**1,466.6483**	**0.0150**		**1,466.9627**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3818	0.0000	0.3818	0.0412	0.0000	0.0412			0.0000			0.0000
Off-Road	1.0874	11.2091	9.2927	0.0186		0.5078	0.5078		0.4792	0.4792		1,789.2341	1,789.2341	0.4193		1,798.0399
Total	**1.0874**	**11.2091**	**9.2927**	**0.0186**	**0.3818**	**0.5078**	**0.8896**	**0.0412**	**0.4792**	**0.5204**		**1,789.2341**	**1,789.2341**	**0.4193**		**1,798.0399**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0231	0.0285	0.3597	1.3600e-003	0.1118	7.8000e-004	0.1126	0.0296	7.2000e-004	0.0304		94.4821	94.4821	3.8800e-003		94.5635
Total	**0.0231**	**0.0285**	**0.3597**	**1.3600e-003**	**0.1118**	**7.8000e-004**	**0.1126**	**0.0296**	**7.2000e-004**	**0.0304**		**94.4821**	**94.4821**	**3.8800e-003**		**94.5635**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Fugitive Dust					0.1718	0.0000	0.1718	0.0186	0.0000	0.0186			0.0000			0.0000
Off-Road	1.0874	11.2091	9.2927	0.0186		0.5078	0.5078		0.4792	0.4792	0.0000	1,789.2341	1,789.2341	0.4193		1,798.0399
Total	**1.0874**	**11.2091**	**9.2927**	**0.0186**	**0.1718**	**0.5078**	**0.6796**	**0.0186**	**0.4792**	**0.4977**	**0.0000**	**1,789.2341**	**1,789.2341**	**0.4193**		**1,798.0399**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0231	0.0285	0.3597	1.3600e-003	0.1118	7.8000e-004	0.1126	0.0296	7.2000e-004	0.0304		94.4821	94.4821	3.8800e-003		94.5635
Total	**0.0231**	**0.0285**	**0.3597**	**1.3600e-003**	**0.1118**	**7.8000e-004**	**0.1126**	**0.0296**	**7.2000e-004**	**0.0304**		**94.4821**	**94.4821**	**3.8800e-003**		**94.5635**

3.5 Trenching - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7427	7.0689	7.3520	0.0102		0.4356	0.4356		0.4016	0.4016		972.2900	972.2900	0.3069		978.7347
Total	**0.7427**	**7.0689**	**7.3520**	**0.0102**		**0.4356**	**0.4356**		**0.4016**	**0.4016**		**972.2900**	**972.2900**	**0.3069**		**978.7347**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0231	0.0285	0.3597	1.3600e-003	0.1118	7.8000e-004	0.1126	0.0296	7.2000e-004	0.0304		94.4821	94.4821	3.8800e-003		94.5635
Total	**0.0231**	**0.0285**	**0.3597**	**1.3600e-003**	**0.1118**	**7.8000e-004**	**0.1126**	**0.0296**	**7.2000e-004**	**0.0304**		**94.4821**	**94.4821**	**3.8800e-003**		**94.5635**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7427	7.0689	7.3520	0.0102		0.4356	0.4356		0.4016	0.4016	0.0000	972.2900	972.2900	0.3069		978.7347
Total	**0.7427**	**7.0689**	**7.3520**	**0.0102**		**0.4356**	**0.4356**		**0.4016**	**0.4016**	**0.0000**	**972.2900**	**972.2900**	**0.3069**		**978.7347**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0231	0.0285	0.3597	1.3600e-003	0.1118	7.8000e-004	0.1126	0.0296	7.2000e-004	0.0304		94.4821	94.4821	3.8800e-003		94.5635
Total	**0.0231**	**0.0285**	**0.3597**	**1.3600e-003**	**0.1118**	**7.8000e-004**	**0.1126**	**0.0296**	**7.2000e-004**	**0.0304**		**94.4821**	**94.4821**	**3.8800e-003**		**94.5635**

3.6 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6823	6.9805	7.1322	0.0113		0.3700	0.3700		0.3404	0.3404		1,097.8914	1,097.8914	0.3551		1,105.3481
Total	**0.6823**	**6.9805**	**7.1322**	**0.0113**		**0.3700**	**0.3700**		**0.3404**	**0.3404**		**1,097.8914**	**1,097.8914**	**0.3551**		**1,105.3481**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0311	0.2253	0.3894	1.0800e-003	0.0313	4.4200e-003	0.0357	8.9000e-003	4.0600e-003	0.0130		100.8811	100.8811	7.5000e-004		100.8969
Worker	0.0301	0.0370	0.4677	1.7700e-003	0.1453	1.0100e-003	0.1463	0.0385	9.4000e-004	0.0395		122.8267	122.8267	5.0400e-003		122.9325

Total	**0.0612**	**0.2624**	**0.8570**	**2.8500e-003**	**0.1766**	**5.4300e-003**	**0.1820**	**0.0474**	**5.0000e-003**	**0.0524**		**223.7078**	**223.7078**	**5.7900e-003**		**223.8294**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6823	6.9805	7.1322	0.0113		0.3700	0.3700		0.3404	0.3404	0.0000	1,097.8914	1,097.8914	0.3551		1,105.3481
Total	**0.6823**	**6.9805**	**7.1322**	**0.0113**		**0.3700**	**0.3700**		**0.3404**	**0.3404**	**0.0000**	**1,097.8914**	**1,097.8914**	**0.3551**		**1,105.3481**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0311	0.2253	0.3894	1.0800e-003	0.0313	4.4200e-003	0.0357	8.9000e-003	4.0600e-003	0.0130		100.8811	100.8811	7.5000e-004		100.8969
Worker	0.0301	0.0370	0.4677	1.7700e-003	0.1453	1.0100e-003	0.1463	0.0385	9.4000e-004	0.0395		122.8267	122.8267	5.0400e-003		122.9325
Total	**0.0612**	**0.2624**	**0.8570**	**2.8500e-003**	**0.1766**	**5.4300e-003**	**0.1820**	**0.0474**	**5.0000e-003**	**0.0524**		**223.7078**	**223.7078**	**5.7900e-003**		**223.8294**

3.7 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2196	1.9875	2.7388	4.5500e-003		0.0942	0.0942		0.0875	0.0875		426.3788	426.3788	0.1296		429.1000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2196**	**1.9875**	**2.7388**	**4.5500e-003**		**0.0942**	**0.0942**		**0.0875**	**0.0875**		**426.3788**	**426.3788**	**0.1296**		**429.1000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0116	0.0142	0.1799	6.8000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.6000e-004	0.0152		47.2411	47.2411	1.9400e-003		47.2817
Total	**0.0116**	**0.0142**	**0.1799**	**6.8000e-004**	**0.0559**	**3.9000e-004**	**0.0563**	**0.0148**	**3.6000e-004**	**0.0152**		**47.2411**	**47.2411**	**1.9400e-003**		**47.2817**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	0.2196	1.9875	2.7388	4.5500e-003		0.0942	0.0942		0.0875	0.0875	0.0000	426.3788	426.3788	0.1296		429.1000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2196**	**1.9875**	**2.7388**	**4.5500e-003**		**0.0942**	**0.0942**		**0.0875**	**0.0875**	**0.0000**	**426.3788**	**426.3788**	**0.1296**		**429.1000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0116	0.0142	0.1799	6.8000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.6000e-004	0.0152		47.2411	47.2411	1.9400e-003		47.2817
Total	**0.0116**	**0.0142**	**0.1799**	**6.8000e-004**	**0.0559**	**3.9000e-004**	**0.0563**	**0.0148**	**3.6000e-004**	**0.0152**		**47.2411**	**47.2411**	**1.9400e-003**		**47.2817**

3.8 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	29.2487					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.8329
Total	**29.4532**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.8329**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	6.9400e-003	8.5500e-003	0.1079	4.1000e-004	0.0335	2.3000e-004	0.0338	8.8900e-003	2.2000e-004	9.1100e-003		28.3446	28.3446	1.1600e-003		28.3690
Total	**6.9400e-003**	**8.5500e-003**	**0.1079**	**4.1000e-004**	**0.0335**	**2.3000e-004**	**0.0338**	**8.8900e-003**	**2.2000e-004**	**9.1100e-003**		**28.3446**	**28.3446**	**1.1600e-003**		**28.3690**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	29.2487					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.8329
Total	**29.4532**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.8329**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	6.9400e-003	8.5500e-003	0.1079	4.1000e-004	0.0335	2.3000e-004	0.0338	8.8900e-003	2.2000e-004	9.1100e-003		28.3446	28.3446	1.1600e-003		28.3690
Total	**6.9400e-003**	**8.5500e-003**	**0.1079**	**4.1000e-004**	**0.0335**	**2.3000e-004**	**0.0338**	**8.8900e-003**	**2.2000e-004**	**9.1100e-003**		**28.3446**	**28.3446**	**1.1600e-003**		**28.3690**

Central Warehouse Corp Yard Expansion

Orange County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	31.55	1000sqft	0.72	31,552.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - modified

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Demolition - modified

Grading - modified

Architectural Coating - modified

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	PhaseEndDate	1/29/2015	2/4/2022
tblConstructionPhase	PhaseStartDate	1/16/2015	1/22/2022
tblGrading	AcresOfGrading	1.00	0.72
tblLandUse	LandUseSquareFeet	31,550.00	31,552.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2022

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

2022	29.4605	14.4791	13.5960	0.0345	4.7577	0.5807	5.3384	0.7755	0.5462	1.3218	0.0000	3,247.5788	3,247.5788	0.4345	0.0000	3,256.7026
Total	**29.4605**	**14.4791**	**13.5960**	**0.0345**	**4.7577**	**0.5807**	**5.3384**	**0.7755**	**0.5462**	**1.3218**	**0.0000**	**3,247.5788**	**3,247.5788**	**0.4345**	**0.0000**	**3,256.7026**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2022	29.4605	14.4791	13.5960	0.0345	2.3932	0.5807	2.9739	0.4175	0.5462	0.9638	0.0000	3,247.5788	3,247.5788	0.4345	0.0000	3,256.7025
Total	**29.4605**	**14.4791**	**13.5960**	**0.0345**	**2.3932**	**0.5807**	**2.9739**	**0.4175**	**0.5462**	**0.9638**	**0.0000**	**3,247.5788**	**3,247.5788**	**0.4345**	**0.0000**	**3,256.7025**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**49.70**	**0.00**	**44.29**	**46.16**	**0.00**	**27.08**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/15/2015	1/15/2015	5	1	
2	Demolition	Demolition	1/22/2022	2/4/2022	5	10	
3	Grading	Grading	2/5/2022	2/8/2022	5	2	
4	Trenching	Trenching	2/9/2022	2/22/2022	5	10	
5	Building Construction	Building Construction	2/23/2022	7/12/2022	5	100	

6	Paving	Paving	7/13/2022	7/19/2022	5	5	
7	Architectural Coating	Architectural Coating	7/20/2022	8/2/2022	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0.72

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 47,328; Non-Residential Outdoor: 15,776 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	0	8.00	174	0.41
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Crawler Tractors	1	8.00	208	0.43
Demolition	Rubber Tired Dozers	0	1.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Crawler Tractors	1	8.00	208	0.43
Grading	Rubber Tired Dozers	0	1.00	255	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Trenching	Plate Compactors	1	8.00	8	0.43
Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Trenchers	1	8.00	80	0.50
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	0	7.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	0	7.00	80	0.38

Paving	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	10.00	0.00	199.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	13.00	5.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Clean Paved Roads

3.2 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.2991	0.0000	4.2991	0.6509	0.0000	0.6509			0.0000			0.0000
Off-Road	1.0874	11.2091	9.2927	0.0186		0.5078	0.5078		0.4792	0.4792		1,789.2341	1,789.2341	0.4193		1,798.0399
Total	**1.0874**	**11.2091**	**9.2927**	**0.0186**	**4.2991**	**0.5078**	**4.8069**	**0.6509**	**0.4792**	**1.1301**		**1,789.2341**	**1,789.2341**	**0.4193**		**1,798.0399**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3220	3.2387	3.9689	0.0146	0.3468	0.0721	0.4190	0.0950	0.0663	0.1613		1,368.8923	1,368.8923	0.0113		1,369.1289
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0243	0.0313	0.3344	1.2900e-003	0.1118	7.8000e-004	0.1126	0.0296	7.2000e-004	0.0304		89.4525	89.4525	3.8800e-003		89.5338

Total	**0.3462**	**3.2700**	**4.3033**	**0.0159**	**0.4586**	**0.0729**	**0.5315**	**0.1246**	**0.0671**	**0.1917**		**1,458.3448**	**1,458.3448**	**0.0151**		**1,458.6627**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.9346	0.0000	1.9346	0.2929	0.0000	0.2929			0.0000			0.0000
Off-Road	1.0874	11.2091	9.2927	0.0186		0.5078	0.5078		0.4792	0.4792	0.0000	1,789.2341	1,789.2341	0.4193		1,798.0399
Total	**1.0874**	**11.2091**	**9.2927**	**0.0186**	**1.9346**	**0.5078**	**2.4424**	**0.2929**	**0.4792**	**0.7721**	**0.0000**	**1,789.2341**	**1,789.2341**	**0.4193**		**1,798.0399**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3220	3.2387	3.9689	0.0146	0.3468	0.0721	0.4190	0.0950	0.0663	0.1613		1,368.8923	1,368.8923	0.0113		1,369.1289
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0243	0.0313	0.3344	1.2900e-003	0.1118	7.8000e-004	0.1126	0.0296	7.2000e-004	0.0304		89.4525	89.4525	3.8800e-003		89.5338
Total	**0.3462**	**3.2700**	**4.3033**	**0.0159**	**0.4586**	**0.0729**	**0.5315**	**0.1246**	**0.0671**	**0.1917**		**1,458.3448**	**1,458.3448**	**0.0151**		**1,458.6627**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3818	0.0000	0.3818	0.0412	0.0000	0.0412			0.0000			0.0000
Off-Road	1.0874	11.2091	9.2927	0.0186		0.5078	0.5078		0.4792	0.4792		1,789.2341	1,789.2341	0.4193		1,798.0399
Total	**1.0874**	**11.2091**	**9.2927**	**0.0186**	**0.3818**	**0.5078**	**0.8896**	**0.0412**	**0.4792**	**0.5204**		**1,789.2341**	**1,789.2341**	**0.4193**		**1,798.0399**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0243	0.0313	0.3344	1.2900e-003	0.1118	7.8000e-004	0.1126	0.0296	7.2000e-004	0.0304		89.4525	89.4525	3.8800e-003		89.5338
Total	**0.0243**	**0.0313**	**0.3344**	**1.2900e-003**	**0.1118**	**7.8000e-004**	**0.1126**	**0.0296**	**7.2000e-004**	**0.0304**		**89.4525**	**89.4525**	**3.8800e-003**		**89.5338**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Fugitive Dust					0.1718	0.0000	0.1718	0.0186	0.0000	0.0186			0.0000			0.0000
Off-Road	1.0874	11.2091	9.2927	0.0186		0.5078	0.5078		0.4792	0.4792	0.0000	1,789.2341	1,789.2341	0.4193		1,798.0399
Total	**1.0874**	**11.2091**	**9.2927**	**0.0186**	**0.1718**	**0.5078**	**0.6796**	**0.0186**	**0.4792**	**0.4977**	**0.0000**	**1,789.2341**	**1,789.2341**	**0.4193**		**1,798.0399**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0243	0.0313	0.3344	1.2900e-003	0.1118	7.8000e-004	0.1126	0.0296	7.2000e-004	0.0304		89.4525	89.4525	3.8800e-003		89.5338
Total	**0.0243**	**0.0313**	**0.3344**	**1.2900e-003**	**0.1118**	**7.8000e-004**	**0.1126**	**0.0296**	**7.2000e-004**	**0.0304**		**89.4525**	**89.4525**	**3.8800e-003**		**89.5338**

3.5 Trenching - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7427	7.0689	7.3520	0.0102		0.4356	0.4356		0.4016	0.4016		972.2900	972.2900	0.3069		978.7347
Total	**0.7427**	**7.0689**	**7.3520**	**0.0102**		**0.4356**	**0.4356**		**0.4016**	**0.4016**		**972.2900**	**972.2900**	**0.3069**		**978.7347**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0243	0.0313	0.3344	1.2900e-003	0.1118	7.8000e-004	0.1126	0.0296	7.2000e-004	0.0304		89.4525	89.4525	3.8800e-003		89.5338
Total	**0.0243**	**0.0313**	**0.3344**	**1.2900e-003**	**0.1118**	**7.8000e-004**	**0.1126**	**0.0296**	**7.2000e-004**	**0.0304**		**89.4525**	**89.4525**	**3.8800e-003**		**89.5338**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7427	7.0689	7.3520	0.0102		0.4356	0.4356		0.4016	0.4016	0.0000	972.2900	972.2900	0.3069		978.7347
Total	**0.7427**	**7.0689**	**7.3520**	**0.0102**		**0.4356**	**0.4356**		**0.4016**	**0.4016**	**0.0000**	**972.2900**	**972.2900**	**0.3069**		**978.7347**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0243	0.0313	0.3344	1.2900e-003	0.1118	7.8000e-004	0.1126	0.0296	7.2000e-004	0.0304		89.4525	89.4525	3.8800e-003		89.5338
Total	**0.0243**	**0.0313**	**0.3344**	**1.2900e-003**	**0.1118**	**7.8000e-004**	**0.1126**	**0.0296**	**7.2000e-004**	**0.0304**		**89.4525**	**89.4525**	**3.8800e-003**		**89.5338**

3.6 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6823	6.9805	7.1322	0.0113		0.3700	0.3700		0.3404	0.3404		1,097.8914	1,097.8914	0.3551		1,105.3481
Total	**0.6823**	**6.9805**	**7.1322**	**0.0113**		**0.3700**	**0.3700**		**0.3404**	**0.3404**		**1,097.8914**	**1,097.8914**	**0.3551**		**1,105.3481**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0338	0.2302	0.4861	1.0700e-003	0.0313	4.4500e-003	0.0357	8.9000e-003	4.1000e-003	0.0130		100.0238	100.0238	7.8000e-004		100.0401
Worker	0.0315	0.0407	0.4347	1.6800e-003	0.1453	1.0100e-003	0.1463	0.0385	9.4000e-004	0.0395		116.2882	116.2882	5.0400e-003		116.3940

Total	**0.0653**	**0.2709**	**0.9209**	**2.7500e-003**	**0.1766**	**5.4600e-003**	**0.1820**	**0.0474**	**5.0400e-003**	**0.0525**		**216.3119**	**216.3119**	**5.8200e-003**		**216.4341**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6823	6.9805	7.1322	0.0113		0.3700	0.3700		0.3404	0.3404	0.0000	1,097.8914	1,097.8914	0.3551		1,105.3481
Total	**0.6823**	**6.9805**	**7.1322**	**0.0113**		**0.3700**	**0.3700**		**0.3404**	**0.3404**	**0.0000**	**1,097.8914**	**1,097.8914**	**0.3551**		**1,105.3481**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0338	0.2302	0.4861	1.0700e-003	0.0313	4.4500e-003	0.0357	8.9000e-003	4.1000e-003	0.0130		100.0238	100.0238	7.8000e-004		100.0401
Worker	0.0315	0.0407	0.4347	1.6800e-003	0.1453	1.0100e-003	0.1463	0.0385	9.4000e-004	0.0395		116.2882	116.2882	5.0400e-003		116.3940
Total	**0.0653**	**0.2709**	**0.9209**	**2.7500e-003**	**0.1766**	**5.4600e-003**	**0.1820**	**0.0474**	**5.0400e-003**	**0.0525**		**216.3119**	**216.3119**	**5.8200e-003**		**216.4341**

3.7 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2196	1.9875	2.7388	4.5500e-003		0.0942	0.0942		0.0875	0.0875		426.3788	426.3788	0.1296		429.1000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2196**	**1.9875**	**2.7388**	**4.5500e-003**		**0.0942**	**0.0942**		**0.0875**	**0.0875**		**426.3788**	**426.3788**	**0.1296**		**429.1000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0121	0.0157	0.1672	6.5000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.6000e-004	0.0152		44.7262	44.7262	1.9400e-003		44.7669
Total	**0.0121**	**0.0157**	**0.1672**	**6.5000e-004**	**0.0559**	**3.9000e-004**	**0.0563**	**0.0148**	**3.6000e-004**	**0.0152**		**44.7262**	**44.7262**	**1.9400e-003**		**44.7669**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	0.2196	1.9875	2.7388	4.5500e-003		0.0942	0.0942		0.0875	0.0875	0.0000	426.3788	426.3788	0.1296		429.1000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2196**	**1.9875**	**2.7388**	**4.5500e-003**		**0.0942**	**0.0942**		**0.0875**	**0.0875**	**0.0000**	**426.3788**	**426.3788**	**0.1296**		**429.1000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0121	0.0157	0.1672	6.5000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.6000e-004	0.0152		44.7262	44.7262	1.9400e-003		44.7669
Total	**0.0121**	**0.0157**	**0.1672**	**6.5000e-004**	**0.0559**	**3.9000e-004**	**0.0563**	**0.0148**	**3.6000e-004**	**0.0152**		**44.7262**	**44.7262**	**1.9400e-003**		**44.7669**

3.8 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	29.2487					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.8329
Total	**29.4532**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.8329**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	7.2800e-003	9.3900e-003	0.1003	3.9000e-004	0.0335	2.3000e-004	0.0338	8.8900e-003	2.2000e-004	9.1100e-003		26.8357	26.8357	1.1600e-003		26.8602
Total	**7.2800e-003**	**9.3900e-003**	**0.1003**	**3.9000e-004**	**0.0335**	**2.3000e-004**	**0.0338**	**8.8900e-003**	**2.2000e-004**	**9.1100e-003**		**26.8357**	**26.8357**	**1.1600e-003**		**26.8602**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	29.2487					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.8329
Total	**29.4532**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.8329**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	7.2800e-003	9.3900e-003	0.1003	3.9000e-004	0.0335	2.3000e-004	0.0338	8.8900e-003	2.2000e-004	9.1100e-003		26.8357	26.8357	1.1600e-003		26.8602
Total	**7.2800e-003**	**9.3900e-003**	**0.1003**	**3.9000e-004**	**0.0335**	**2.3000e-004**	**0.0338**	**8.8900e-003**	**2.2000e-004**	**9.1100e-003**		**26.8357**	**26.8357**	**1.1600e-003**		**26.8602**

Thermal Energy Storage Unit

Orange County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	20.50	1000sqft	0.47	20,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment -

Grading - modified

Demolition -

Architectural Coating - Assume worst case scenario Cylindrical surface area. Largest tank base diameter would be 90 feet, therefore largest SA is 17,879 ft^2 if volume = 116,000 ft^2

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	10,250.00	17,879.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	30,750.00	0.00
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	2.00	4.00
tblConstructionPhase	PhaseEndDate	7/13/2015	8/2/2021
tblConstructionPhase	PhaseEndDate	1/22/2015	6/15/2015
tblConstructionPhase	PhaseStartDate	6/16/2015	7/6/2021
tblConstructionPhase	PhaseStartDate	1/16/2015	6/9/2015
tblGrading	AcresOfGrading	0.00	0.50
tblOffRoadEquipment	LoadFactor	0.43	0.43
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.50	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Trenchers
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2022

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2021	0.0726	0.6816	0.6612	1.1700e-003	0.0255	0.0361	0.0615	4.8700e-003	0.0338	0.0387	0.0000	99.2125	99.2125	0.0224	0.0000	99.6820
2022	0.1072	0.0304	0.0354	6.0000e-005	4.0000e-004	1.6100e-003	2.0100e-003	1.1000e-004	1.5300e-003	1.6400e-003	0.0000	5.1129	5.1129	9.6000e-004	0.0000	5.1331
Total	**0.1798**	**0.7120**	**0.6966**	**1.2300e-003**	**0.0259**	**0.0377**	**0.0635**	**4.9800e-003**	**0.0353**	**0.0403**	**0.0000**	**104.3254**	**104.3254**	**0.0233**	**0.0000**	**104.8151**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

2021	0.0726	0.6816	0.6612	1.1700e-003	0.0255	0.0361	0.0615	4.8700e-003	0.0338	0.0387	0.0000	99.2124	99.2124	0.0224	0.0000	99.6819
2022	0.1072	0.0304	0.0354	6.0000e-005	4.0000e-004	1.6100e-003	2.0100e-003	1.1000e-004	1.5300e-003	1.6400e-003	0.0000	5.1129	5.1129	9.6000e-004	0.0000	5.1331
Total	**0.1798**	**0.7120**	**0.6966**	**1.2300e-003**	**0.0259**	**0.0377**	**0.0635**	**4.9800e-003**	**0.0353**	**0.0403**	**0.0000**	**104.3253**	**104.3253**	**0.0233**	**0.0000**	**104.8150**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/15/2015	1/15/2015	5	1	
2	Paving	Paving	6/9/2015	6/15/2015	5	5	
3	Demolition	Demolition	7/6/2021	8/2/2021	5	20	
4	Trenching	Trenching	8/3/2021	8/16/2021	5	10	
5	Grading	Grading	8/17/2021	8/20/2021	5	4	
6	Building Construction	Building Construction	8/21/2021	1/7/2022	5	100	
7	Architectural Coating	Architectural Coating	1/8/2022	1/21/2022	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 17,879 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48

Paving	Cement and Mortar Mixers	0	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	0	8.00	81	0.73
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	0	8.00	174	0.41
Paving	Pavers	0	7.00	125	0.42
Paving	Rollers	0	7.00	80	0.38
Demolition	Rubber Tired Dozers	0	1.00	255	0.40
Grading	Rubber Tired Dozers	0	1.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Demolition	Crawler Tractors	1	8.00	208	0.43
Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Trenchers	1	8.00	80	0.50
Trenching	Cement and Mortar Mixers	1	4.00	9	0.56
Trenching	Plate Compactors	1	8.00	8	0.43
Grading	Excavators	1	8.00	162	0.38
Building Construction	Welders	1	4.00	46	0.45
Building Construction	Generator Sets	1	4.00	84	0.74

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	152.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Building Construction	7	9.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Paving - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0165	0.0000	0.0165	2.4900e-003	0.0000	2.4900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0121	0.1270	0.0945	1.9000e-004		5.9700e-003	5.9700e-003		5.6300e-003	5.6300e-003	0.0000	16.2200	16.2200	3.8200e-003	0.0000	16.3002
Total	**0.0121**	**0.1270**	**0.0945**	**1.9000e-004**	**0.0165**	**5.9700e-003**	**0.0224**	**2.4900e-003**	**5.6300e-003**	**8.1200e-003**	**0.0000**	**16.2200**	**16.2200**	**3.8200e-003**	**0.0000**	**16.3002**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.2100e-003	0.0138	0.0147	6.0000e-005	1.3000e-003	2.8000e-004	1.5800e-003	3.6000e-004	2.6000e-004	6.1000e-004	0.0000	4.7536	4.7536	4.0000e-005	0.0000	4.7544
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-004	3.4000e-004	3.6200e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.8374	0.8374	4.0000e-005	0.0000	0.8382
Total	**1.4500e-003**	**0.0141**	**0.0184**	**7.0000e-005**	**2.4000e-003**	**2.9000e-004**	**2.6900e-003**	**6.5000e-004**	**2.7000e-004**	**9.1000e-004**	**0.0000**	**5.5911**	**5.5911**	**8.0000e-005**	**0.0000**	**5.5926**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0165	0.0000	0.0165	2.4900e-003	0.0000	2.4900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0121	0.1270	0.0945	1.9000e-004		5.9700e-003	5.9700e-003		5.6300e-003	5.6300e-003	0.0000	16.2200	16.2200	3.8200e-003	0.0000	16.3002
Total	**0.0121**	**0.1270**	**0.0945**	**1.9000e-004**	**0.0165**	**5.9700e-003**	**0.0224**	**2.4900e-003**	**5.6300e-003**	**8.1200e-003**	**0.0000**	**16.2200**	**16.2200**	**3.8200e-003**	**0.0000**	**16.3002**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Hauling	1.2100e-003	0.0138	0.0147	6.0000e-005	1.3000e-003	2.8000e-004	1.5800e-003	3.6000e-004	2.6000e-004	6.1000e-004	0.0000	4.7536	4.7536	4.0000e-005	0.0000	4.7544
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-004	3.4000e-004	3.6200e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.8374	0.8374	4.0000e-005	0.0000	0.8382
Total	**1.4500e-003**	**0.0141**	**0.0184**	**7.0000e-005**	**2.4000e-003**	**2.9000e-004**	**2.6900e-003**	**6.5000e-004**	**2.7000e-004**	**9.1000e-004**	**0.0000**	**5.5911**	**5.5911**	**8.0000e-005**	**0.0000**	**5.5926**

3.5 Trenching - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.1800e-003	0.0392	0.0378	5.0000e-005		2.5100e-003	2.5100e-003		2.3200e-003	2.3200e-003	0.0000	4.5181	4.5181	1.4000e-003	0.0000	4.5476
Total	**4.1800e-003**	**0.0392**	**0.0378**	**5.0000e-005**		**2.5100e-003**	**2.5100e-003**		**2.3200e-003**	**2.3200e-003**	**0.0000**	**4.5181**	**4.5181**	**1.4000e-003**	**0.0000**	**4.5476**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	2.2000e-004	2.3500e-003	1.0000e-005	7.1000e-004	1.0000e-005	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5443	0.5443	2.0000e-005	0.0000	0.5448

Total	**1.5000e-004**	**2.2000e-004**	**2.3500e-003**	**1.0000e-005**	**7.1000e-004**	**1.0000e-005**	**7.2000e-004**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**0.5443**	**0.5443**	**2.0000e-005**	**0.0000**	**0.5448**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.1800e-003	0.0392	0.0378	5.0000e-005		2.5100e-003	2.5100e-003		2.3200e-003	2.3200e-003	0.0000	4.5181	4.5181	1.4000e-003	0.0000	4.5476
Total	**4.1800e-003**	**0.0392**	**0.0378**	**5.0000e-005**		**2.5100e-003**	**2.5100e-003**		**2.3200e-003**	**2.3200e-003**	**0.0000**	**4.5181**	**4.5181**	**1.4000e-003**	**0.0000**	**4.5476**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	2.2000e-004	2.3500e-003	1.0000e-005	7.1000e-004	1.0000e-005	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5443	0.5443	2.0000e-005	0.0000	0.5448
Total	**1.5000e-004**	**2.2000e-004**	**2.3500e-003**	**1.0000e-005**	**7.1000e-004**	**1.0000e-005**	**7.2000e-004**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**0.5443**	**0.5443**	**2.0000e-005**	**0.0000**	**0.5448**

3.6 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.7000e-004	4.4400e-003	6.7400e-003	1.0000e-005		2.2000e-004	2.2000e-004		2.0000e-004	2.0000e-004	0.0000	0.9352	0.9352	3.0000e-004	0.0000	0.9415
Total	**4.7000e-004**	**4.4400e-003**	**6.7400e-003**	**1.0000e-005**	**2.7000e-004**	**2.2000e-004**	**4.9000e-004**	**3.0000e-005**	**2.0000e-004**	**2.3000e-004**	**0.0000**	**0.9352**	**0.9352**	**3.0000e-004**	**0.0000**	**0.9415**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	2.0000e-005	2.2000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0503	0.0503	0.0000	0.0000	0.0503
Total	**1.0000e-005**	**2.0000e-005**	**2.2000e-004**	**0.0000**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0503**	**0.0503**	**0.0000**	**0.0000**	**0.0503**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.7000e-004	4.4400e-003	6.7400e-003	1.0000e-005		2.2000e-004	2.2000e-004		2.0000e-004	2.0000e-004	0.0000	0.9352	0.9352	3.0000e-004	0.0000	0.9415
Total	**4.7000e-004**	**4.4400e-003**	**6.7400e-003**	**1.0000e-005**	**2.7000e-004**	**2.2000e-004**	**4.9000e-004**	**3.0000e-005**	**2.0000e-004**	**2.3000e-004**	**0.0000**	**0.9352**	**0.9352**	**3.0000e-004**	**0.0000**	**0.9415**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	2.0000e-005	2.2000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0503	0.0503	0.0000	0.0000	0.0503
Total	**1.0000e-005**	**2.0000e-005**	**2.2000e-004**	**0.0000**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0503**	**0.0503**	**0.0000**	**0.0000**	**0.0503**

3.7 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0523	0.4878	0.4723	7.5000e-004		0.0269	0.0269		0.0252	0.0252	0.0000	65.1723	65.1723	0.0166	0.0000	65.5200
Total	**0.0523**	**0.4878**	**0.4723**	**7.5000e-004**		**0.0269**	**0.0269**		**0.0252**	**0.0252**	**0.0000**	**65.1723**	**65.1723**	**0.0166**	**0.0000**	**65.5200**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.5000e-004	7.3700e-003	0.0135	3.0000e-005	8.8000e-004	1.3000e-004	1.0100e-003	2.5000e-004	1.2000e-004	3.7000e-004	0.0000	2.6011	2.6011	2.0000e-005	0.0000	2.6015
Worker	1.0200e-003	1.4600e-003	0.0155	6.0000e-005	4.6900e-003	3.0000e-005	4.7300e-003	1.2500e-003	3.0000e-005	1.2800e-003	0.0000	3.5801	3.5801	1.6000e-004	0.0000	3.5833
Total	**1.9700e-003**	**8.8300e-003**	**0.0289**	**9.0000e-005**	**5.5700e-003**	**1.6000e-004**	**5.7400e-003**	**1.5000e-003**	**1.5000e-004**	**1.6500e-003**	**0.0000**	**6.1812**	**6.1812**	**1.8000e-004**	**0.0000**	**6.1849**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0523	0.4878	0.4723	7.5000e-004		0.0269	0.0269		0.0252	0.0252	0.0000	65.1722	65.1722	0.0166	0.0000	65.5200
Total	**0.0523**	**0.4878**	**0.4723**	**7.5000e-004**		**0.0269**	**0.0269**		**0.0252**	**0.0252**	**0.0000**	**65.1722**	**65.1722**	**0.0166**	**0.0000**	**65.5200**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.5000e-004	7.3700e-003	0.0135	3.0000e-005	8.8000e-004	1.3000e-004	1.0100e-003	2.5000e-004	1.2000e-004	3.7000e-004	0.0000	2.6011	2.6011	2.0000e-005	0.0000	2.6015
Worker	1.0200e-003	1.4600e-003	0.0155	6.0000e-005	4.6900e-003	3.0000e-005	4.7300e-003	1.2500e-003	3.0000e-005	1.2800e-003	0.0000	3.5801	3.5801	1.6000e-004	0.0000	3.5833
Total	**1.9700e-003**	**8.8300e-003**	**0.0289**	**9.0000e-005**	**5.5700e-003**	**1.6000e-004**	**5.7400e-003**	**1.5000e-003**	**1.5000e-004**	**1.6500e-003**	**0.0000**	**6.1812**	**6.1812**	**1.8000e-004**	**0.0000**	**6.1849**

3.7 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.4600e-003	0.0229	0.0246	4.0000e-005		1.1900e-003	1.1900e-003		1.1100e-003	1.1100e-003	0.0000	3.4318	3.4318	8.7000e-004	0.0000	3.4500
Total	**2.4600e-003**	**0.0229**	**0.0246**	**4.0000e-005**		**1.1900e-003**	**1.1900e-003**		**1.1100e-003**	**1.1100e-003**	**0.0000**	**3.4318**	**3.4318**	**8.7000e-004**	**0.0000**	**3.4500**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.0000e-005	3.5000e-004	6.9000e-004	0.0000	5.0000e-005	1.0000e-005	5.0000e-005	1.0000e-005	1.0000e-005	2.0000e-005	0.0000	0.1368	0.1368	0.0000	0.0000	0.1368
Worker	5.0000e-005	7.0000e-005	7.7000e-004	0.0000	2.5000e-004	0.0000	2.5000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.1854	0.1854	1.0000e-005	0.0000	0.1855

Total	**1.0000e-004**	**4.2000e-004**	**1.4600e-003**	**0.0000**	**3.0000e-004**	**1.0000e-005**	**3.0000e-004**	**8.0000e-005**	**1.0000e-005**	**9.0000e-005**	**0.0000**	**0.3222**	**0.3222**	**1.0000e-005**	**0.0000**	**0.3223**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.4600e-003	0.0229	0.0246	4.0000e-005		1.1900e-003	1.1900e-003		1.1100e-003	1.1100e-003	0.0000	3.4318	3.4318	8.7000e-004	0.0000	3.4500
Total	**2.4600e-003**	**0.0229**	**0.0246**	**4.0000e-005**		**1.1900e-003**	**1.1900e-003**		**1.1100e-003**	**1.1100e-003**	**0.0000**	**3.4318**	**3.4318**	**8.7000e-004**	**0.0000**	**3.4500**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.0000e-005	3.5000e-004	6.9000e-004	0.0000	5.0000e-005	1.0000e-005	5.0000e-005	1.0000e-005	1.0000e-005	2.0000e-005	0.0000	0.1368	0.1368	0.0000	0.0000	0.1368
Worker	5.0000e-005	7.0000e-005	7.7000e-004	0.0000	2.5000e-004	0.0000	2.5000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.1854	0.1854	1.0000e-005	0.0000	0.1855
Total	**1.0000e-004**	**4.2000e-004**	**1.4600e-003**	**0.0000**	**3.0000e-004**	**1.0000e-005**	**3.0000e-004**	**8.0000e-005**	**1.0000e-005**	**9.0000e-005**	**0.0000**	**0.3222**	**0.3222**	**1.0000e-005**	**0.0000**	**0.3223**

3.8 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1036					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0200e-003	7.0400e-003	9.0700e-003	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2784
Total	**0.1046**	**7.0400e-003**	**9.0700e-003**	**1.0000e-005**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2784**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	3.0000e-005	3.4000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0824	0.0824	0.0000	0.0000	0.0825
Total	**2.0000e-005**	**3.0000e-005**	**3.4000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0824**	**0.0824**	**0.0000**	**0.0000**	**0.0825**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Archit. Coating	0.1036					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0200e-003	7.0400e-003	9.0700e-003	1.0000e-005		4.1000e-004	4.1000e-004		4.1000e-004	4.1000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2784
Total	**0.1046**	**7.0400e-003**	**9.0700e-003**	**1.0000e-005**		**4.1000e-004**	**4.1000e-004**		**4.1000e-004**	**4.1000e-004**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2784**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	3.0000e-005	3.4000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0824	0.0824	0.0000	0.0000	0.0825
Total	**2.0000e-005**	**3.0000e-005**	**3.4000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0824**	**0.0824**	**0.0000**	**0.0000**	**0.0825**

Thermal Energy Storage Unit

Orange County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	20.50	1000sqft	0.47	20,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment -

Grading - modified

Demolition -

Architectural Coating - Assume worst case scenario Cylindrical surface area. Largest tank base diameter would be 90 feet, therefore largest SA is 17,879 ft^2 if volume = 116,000 ft^2

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	10,250.00	17,879.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	30,750.00	0.00
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	2.00	4.00
tblConstructionPhase	PhaseEndDate	7/13/2015	8/2/2021
tblConstructionPhase	PhaseEndDate	1/22/2015	6/15/2015
tblConstructionPhase	PhaseStartDate	6/16/2015	7/6/2021
tblConstructionPhase	PhaseStartDate	1/16/2015	6/9/2015
tblGrading	AcresOfGrading	0.00	0.50
tblOffRoadEquipment	LoadFactor	0.43	0.43
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.50	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Trenchers
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2022

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2021	1.3467	14.0397	11.1274	0.0255	1.8898	0.6258	2.5156	0.3151	0.5896	0.9047	0.0000	2,408.5143	2,408.5143	0.4292	0.0000	2,417.5270
2022	20.9265	9.3369	10.3755	0.0178	0.1194	0.4788	0.5982	0.0320	0.4489	0.4810	0.0000	1,658.7101	1,658.7101	0.3862	0.0000	1,666.8209
Total	**22.2732**	**23.3766**	**21.5029**	**0.0433**	**2.0092**	**1.1046**	**3.1138**	**0.3471**	**1.0385**	**1.3856**	**0.0000**	**4,067.2244**	**4,067.2244**	**0.8154**	**0.0000**	**4,084.3479**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

2021	1.3467	14.0397	11.1274	0.0255	1.8898	0.6258	2.5156	0.3151	0.5896	0.9047	0.0000	2,408.5143	2,408.5143	0.4292	0.0000	2,417.5270
2022	20.9265	9.3369	10.3755	0.0178	0.1194	0.4788	0.5982	0.0320	0.4489	0.4810	0.0000	1,658.7100	1,658.7100	0.3862	0.0000	1,666.8209
Total	**22.2732**	**23.3766**	**21.5029**	**0.0433**	**2.0092**	**1.1046**	**3.1138**	**0.3471**	**1.0385**	**1.3856**	**0.0000**	**4,067.2244**	**4,067.2244**	**0.8154**	**0.0000**	**4,084.3479**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/15/2015	1/15/2015	5	1	
2	Paving	Paving	6/9/2015	6/15/2015	5	5	
3	Demolition	Demolition	7/6/2021	8/2/2021	5	20	
4	Trenching	Trenching	8/3/2021	8/16/2021	5	10	
5	Grading	Grading	8/17/2021	8/20/2021	5	4	
6	Building Construction	Building Construction	8/21/2021	1/7/2022	5	100	
7	Architectural Coating	Architectural Coating	1/8/2022	1/21/2022	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 17,879 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48

Paving	Cement and Mortar Mixers	0	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	0	8.00	81	0.73
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	0	8.00	174	0.41
Paving	Pavers	0	7.00	125	0.42
Paving	Rollers	0	7.00	80	0.38
Demolition	Rubber Tired Dozers	0	1.00	255	0.40
Grading	Rubber Tired Dozers	0	1.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Demolition	Crawler Tractors	1	8.00	208	0.43
Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Trenchers	1	8.00	80	0.50
Trenching	Cement and Mortar Mixers	1	4.00	9	0.56
Trenching	Plate Compactors	1	8.00	8	0.43
Grading	Excavators	1	8.00	162	0.38
Building Construction	Welders	1	4.00	46	0.45
Building Construction	Generator Sets	1	4.00	84	0.74

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	152.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Building Construction	7	9.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Paving - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.4 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.6456	0.0000	1.6456	0.2492	0.0000	0.2492			0.0000			0.0000
Off-Road	1.2048	12.6991	9.4469	0.0186		0.5973	0.5973		0.5633	0.5633		1,787.9484	1,787.9484	0.4210		1,796.7893
Total	**1.2048**	**12.6991**	**9.4469**	**0.0186**	**1.6456**	**0.5973**	**2.2429**	**0.2492**	**0.5633**	**0.8125**		**1,787.9484**	**1,787.9484**	**0.4210**		**1,796.7893**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1177	1.3104	1.3006	5.5800e-003	0.1325	0.0277	0.1602	0.0363	0.0255	0.0618		524.5227	524.5227	4.1500e-003		524.6098
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0243	0.0302	0.3799	1.3600e-003	0.1118	7.7000e-004	0.1126	0.0296	7.2000e-004	0.0304		96.0433	96.0433	4.0300e-003		96.1279
Total	**0.1419**	**1.3406**	**1.6805**	**6.9400e-003**	**0.2442**	**0.0285**	**0.2727**	**0.0659**	**0.0262**	**0.0922**		**620.5659**	**620.5659**	**8.1800e-003**		**620.7377**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.6456	0.0000	1.6456	0.2492	0.0000	0.2492			0.0000			0.0000
Off-Road	1.2048	12.6991	9.4469	0.0186		0.5973	0.5973		0.5633	0.5633	0.0000	1,787.9484	1,787.9484	0.4210		1,796.7893
Total	**1.2048**	**12.6991**	**9.4469**	**0.0186**	**1.6456**	**0.5973**	**2.2429**	**0.2492**	**0.5633**	**0.8125**	**0.0000**	**1,787.9484**	**1,787.9484**	**0.4210**		**1,796.7893**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day										lb/day					
Hauling	0.1177	1.3104	1.3006	5.5800e-003	0.1325	0.0277	0.1602	0.0363	0.0255	0.0618		524.5227	524.5227	4.1500e-003		524.6098
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0243	0.0302	0.3799	1.3600e-003	0.1118	7.7000e-004	0.1126	0.0296	7.2000e-004	0.0304		96.0433	96.0433	4.0300e-003		96.1279
Total	**0.1419**	**1.3406**	**1.6805**	**6.9400e-003**	**0.2442**	**0.0285**	**0.2727**	**0.0659**	**0.0262**	**0.0922**		**620.5659**	**620.5659**	**8.1800e-003**		**620.7377**

3.5 Trenching - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8368	7.8318	7.5533	0.0105		0.5024	0.5024		0.4636	0.4636		996.0796	996.0796	0.3090		1,002.5693
Total	**0.8368**	**7.8318**	**7.5533**	**0.0105**		**0.5024**	**0.5024**		**0.4636**	**0.4636**		**996.0796**	**996.0796**	**0.3090**		**1,002.5693**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0316	0.0393	0.4939	1.7700e-003	0.1453	1.0000e-003	0.1463	0.0385	9.3000e-004	0.0395		124.8562	124.8562	5.2400e-003		124.9663

Total	**0.0316**	**0.0393**	**0.4939**	**1.7700e-003**	**0.1453**	**1.0000e-003**	**0.1463**	**0.0385**	**9.3000e-004**	**0.0395**		**124.8562**	**124.8562**	**5.2400e-003**		**124.9663**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8368	7.8318	7.5533	0.0105		0.5024	0.5024		0.4636	0.4636	0.0000	996.0796	996.0796	0.3090		1,002.5693
Total	**0.8368**	**7.8318**	**7.5533**	**0.0105**		**0.5024**	**0.5024**		**0.4636**	**0.4636**	**0.0000**	**996.0796**	**996.0796**	**0.3090**		**1,002.5693**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0316	0.0393	0.4939	1.7700e-003	0.1453	1.0000e-003	0.1463	0.0385	9.3000e-004	0.0395		124.8562	124.8562	5.2400e-003		124.9663
Total	**0.0316**	**0.0393**	**0.4939**	**1.7700e-003**	**0.1453**	**1.0000e-003**	**0.1463**	**0.0385**	**9.3000e-004**	**0.0395**		**124.8562**	**124.8562**	**5.2400e-003**		**124.9663**

3.6 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1326	0.0000	0.1326	0.0143	0.0000	0.0143			0.0000			0.0000
Off-Road	0.2362	2.2190	3.3714	5.3200e-003		0.1076	0.1076		0.0990	0.0990		515.4193	515.4193	0.1667		518.9200
Total	**0.2362**	**2.2190**	**3.3714**	**5.3200e-003**	**0.1326**	**0.1076**	**0.2402**	**0.0143**	**0.0990**	**0.1133**		**515.4193**	**515.4193**	**0.1667**		**518.9200**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	7.2800e-003	9.0600e-003	0.1140	4.1000e-004	0.0335	2.3000e-004	0.0338	8.8900e-003	2.1000e-004	9.1100e-003		28.8130	28.8130	1.2100e-003		28.8384
Total	**7.2800e-003**	**9.0600e-003**	**0.1140**	**4.1000e-004**	**0.0335**	**2.3000e-004**	**0.0338**	**8.8900e-003**	**2.1000e-004**	**9.1100e-003**		**28.8130**	**28.8130**	**1.2100e-003**		**28.8384**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Fugitive Dust					0.1326	0.0000	0.1326	0.0143	0.0000	0.0143			0.0000			0.0000
Off-Road	0.2362	2.2190	3.3714	5.3200e-003		0.1076	0.1076		0.0990	0.0990	0.0000	515.4193	515.4193	0.1667		518.9200
Total	**0.2362**	**2.2190**	**3.3714**	**5.3200e-003**	**0.1326**	**0.1076**	**0.2402**	**0.0143**	**0.0990**	**0.1133**	**0.0000**	**515.4193**	**515.4193**	**0.1667**		**518.9200**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	7.2800e-003	9.0600e-003	0.1140	4.1000e-004	0.0335	2.3000e-004	0.0338	8.8900e-003	2.1000e-004	9.1100e-003		28.8130	28.8130	1.2100e-003		28.8384
Total	**7.2800e-003**	**9.0600e-003**	**0.1140**	**4.1000e-004**	**0.0335**	**2.3000e-004**	**0.0338**	**8.8900e-003**	**2.1000e-004**	**9.1100e-003**		**28.8130**	**28.8130**	**1.2100e-003**		**28.8384**

3.7 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1006	10.2700	9.9440	0.0159		0.5663	0.5663		0.5307	0.5307		1,512.4250	1,512.4250	0.3843		1,520.4943
Total	**1.1006**	**10.2700**	**9.9440**	**0.0159**		**0.5663**	**0.5663**		**0.5307**	**0.5307**		**1,512.4250**	**1,512.4250**	**0.3843**		**1,520.4943**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0190	0.1490	0.2390	6.5000e-004	0.0188	2.6800e-003	0.0214	5.3400e-003	2.4700e-003	7.8100e-003		60.5795	60.5795	4.4000e-004		60.5888
Worker	0.0219	0.0272	0.3419	1.2300e-003	0.1006	6.9000e-004	0.1013	0.0267	6.4000e-004	0.0273		86.4389	86.4389	3.6300e-003		86.5151
Total	**0.0409**	**0.1761**	**0.5809**	**1.8800e-003**	**0.1194**	**3.3700e-003**	**0.1227**	**0.0320**	**3.1100e-003**	**0.0351**		**147.0185**	**147.0185**	**4.0700e-003**		**147.1039**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1006	10.2700	9.9440	0.0159		0.5663	0.5663		0.5307	0.5307	0.0000	1,512.4250	1,512.4250	0.3843		1,520.4942
Total	**1.1006**	**10.2700**	**9.9440**	**0.0159**		**0.5663**	**0.5663**		**0.5307**	**0.5307**	**0.0000**	**1,512.4250**	**1,512.4250**	**0.3843**		**1,520.4942**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0190	0.1490	0.2390	6.5000e-004	0.0188	2.6800e-003	0.0214	5.3400e-003	2.4700e-003	7.8100e-003		60.5795	60.5795	4.4000e-004		60.5888
Worker	0.0219	0.0272	0.3419	1.2300e-003	0.1006	6.9000e-004	0.1013	0.0267	6.4000e-004	0.0273		86.4389	86.4389	3.6300e-003		86.5151
Total	**0.0409**	**0.1761**	**0.5809**	**1.8800e-003**	**0.1194**	**3.3700e-003**	**0.1227**	**0.0320**	**3.1100e-003**	**0.0351**		**147.0185**	**147.0185**	**4.0700e-003**		**147.1039**

3.7 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9856	9.1761	9.8181	0.0159		0.4754	0.4754		0.4458	0.4458		1,513.1475	1,513.1475	0.3823		1,521.1757
Total	**0.9856**	**9.1761**	**9.8181**	**0.0159**		**0.4754**	**0.4754**		**0.4458**	**0.4458**		**1,513.1475**	**1,513.1475**	**0.3823**		**1,521.1757**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0187	0.1352	0.2336	6.5000e-004	0.0188	2.6500e-003	0.0214	5.3400e-003	2.4400e-003	7.7800e-003		60.5286	60.5286	4.5000e-004		60.5381
Worker	0.0208	0.0256	0.3238	1.2300e-003	0.1006	7.0000e-004	0.1013	0.0267	6.5000e-004	0.0273		85.0339	85.0339	3.4900e-003		85.1071

Total	**0.0395**	**0.1608**	**0.5574**	**1.8800e-003**	**0.1194**	**3.3500e-003**	**0.1227**	**0.0320**	**3.0900e-003**	**0.0351**		**145.5625**	**145.5625**	**3.9400e-003**		**145.6453**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9856	9.1761	9.8181	0.0159		0.4754	0.4754		0.4458	0.4458	0.0000	1,513.1475	1,513.1475	0.3823		1,521.1757
Total	**0.9856**	**9.1761**	**9.8181**	**0.0159**		**0.4754**	**0.4754**		**0.4458**	**0.4458**	**0.0000**	**1,513.1475**	**1,513.1475**	**0.3823**		**1,521.1757**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0187	0.1352	0.2336	6.5000e-004	0.0188	2.6500e-003	0.0214	5.3400e-003	2.4400e-003	7.7800e-003		60.5286	60.5286	4.5000e-004		60.5381
Worker	0.0208	0.0256	0.3238	1.2300e-003	0.1006	7.0000e-004	0.1013	0.0267	6.5000e-004	0.0273		85.0339	85.0339	3.4900e-003		85.1071
Total	**0.0395**	**0.1608**	**0.5574**	**1.8800e-003**	**0.1194**	**3.3500e-003**	**0.1227**	**0.0320**	**3.0900e-003**	**0.0351**		**145.5625**	**145.5625**	**3.9400e-003**		**145.6453**

3.8 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	20.7173					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.8329
Total	**20.9218**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.8329**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	4.6300e-003	5.7000e-003	0.0720	2.7000e-004	0.0224	1.6000e-004	0.0225	5.9300e-003	1.4000e-004	6.0700e-003		18.8964	18.8964	7.8000e-004		18.9127
Total	**4.6300e-003**	**5.7000e-003**	**0.0720**	**2.7000e-004**	**0.0224**	**1.6000e-004**	**0.0225**	**5.9300e-003**	**1.4000e-004**	**6.0700e-003**		**18.8964**	**18.8964**	**7.8000e-004**		**18.9127**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Archit. Coating	20.7173					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.8329
Total	**20.9218**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.8329**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	4.6300e-003	5.7000e-003	0.0720	2.7000e-004	0.0224	1.6000e-004	0.0225	5.9300e-003	1.4000e-004	6.0700e-003		18.8964	18.8964	7.8000e-004		18.9127
Total	**4.6300e-003**	**5.7000e-003**	**0.0720**	**2.7000e-004**	**0.0224**	**1.6000e-004**	**0.0225**	**5.9300e-003**	**1.4000e-004**	**6.0700e-003**		**18.8964**	**18.8964**	**7.8000e-004**		**18.9127**

Thermal Energy Storage Unit

Orange County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	20.50	1000sqft	0.47	20,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment -

Grading - modified

Demolition -

Architectural Coating - Assume worst case scenario Cylindrical surface area. Largest tank base diameter would be 90 feet, therefore largest SA is 17,879 ft^2 if volume = 116,000 ft^2

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	10,250.00	17,879.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	30,750.00	0.00
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	2.00	4.00
tblConstructionPhase	PhaseEndDate	7/13/2015	8/2/2021
tblConstructionPhase	PhaseEndDate	1/22/2015	6/15/2015
tblConstructionPhase	PhaseStartDate	6/16/2015	7/6/2021
tblConstructionPhase	PhaseStartDate	1/16/2015	6/9/2015
tblGrading	AcresOfGrading	0.00	0.50
tblOffRoadEquipment	LoadFactor	0.43	0.43
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.50	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Trenchers
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2022

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2021	1.3531	14.0870	11.3285	0.0255	1.8898	0.6258	2.5157	0.3151	0.5896	0.9047	0.0000	2,402.1545	2,402.1545	0.4292	0.0000	2,411.1685
2022	20.9267	9.3423	10.4107	0.0177	0.1194	0.4788	0.5982	0.0320	0.4490	0.4810	0.0000	1,653.6690	1,653.6690	0.3863	0.0000	1,661.7802
Total	**22.2798**	**23.4293**	**21.7392**	**0.0432**	**2.0092**	**1.1047**	**3.1138**	**0.3471**	**1.0386**	**1.3857**	**0.0000**	**4,055.8235**	**4,055.8235**	**0.8155**	**0.0000**	**4,072.9487**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

2021	1.3531	14.0870	11.3285	0.0255	1.8898	0.6258	2.5157	0.3151	0.5896	0.9047	0.0000	2,402.1545	2,402.1545	0.4292	0.0000	2,411.1685
2022	20.9267	9.3423	10.4107	0.0177	0.1194	0.4788	0.5982	0.0320	0.4490	0.4810	0.0000	1,653.6690	1,653.6690	0.3863	0.0000	1,661.7802
Total	**22.2798**	**23.4293**	**21.7392**	**0.0432**	**2.0092**	**1.1047**	**3.1138**	**0.3471**	**1.0386**	**1.3857**	**0.0000**	**4,055.8235**	**4,055.8235**	**0.8155**	**0.0000**	**4,072.9487**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/15/2015	1/15/2015	5	1	
2	Paving	Paving	6/9/2015	6/15/2015	5	5	
3	Demolition	Demolition	7/6/2021	8/2/2021	5	20	
4	Trenching	Trenching	8/3/2021	8/16/2021	5	10	
5	Grading	Grading	8/17/2021	8/20/2021	5	4	
6	Building Construction	Building Construction	8/21/2021	1/7/2022	5	100	
7	Architectural Coating	Architectural Coating	1/8/2022	1/21/2022	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 17,879 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48

Paving	Cement and Mortar Mixers	0	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	0	8.00	81	0.73
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	0	8.00	174	0.41
Paving	Pavers	0	7.00	125	0.42
Paving	Rollers	0	7.00	80	0.38
Demolition	Rubber Tired Dozers	0	1.00	255	0.40
Grading	Rubber Tired Dozers	0	1.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Demolition	Crawler Tractors	1	8.00	208	0.43
Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Trenchers	1	8.00	80	0.50
Trenching	Cement and Mortar Mixers	1	4.00	9	0.56
Trenching	Plate Compactors	1	8.00	8	0.43
Grading	Excavators	1	8.00	162	0.38
Building Construction	Welders	1	4.00	46	0.45
Building Construction	Generator Sets	1	4.00	84	0.74

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	152.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Building Construction	7	9.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Paving - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.4 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.6456	0.0000	1.6456	0.2492	0.0000	0.2492			0.0000			0.0000
Off-Road	1.2048	12.6991	9.4469	0.0186		0.5973	0.5973		0.5633	0.5633		1,787.9484	1,787.9484	0.4210		1,796.7893
Total	**1.2048**	**12.6991**	**9.4469**	**0.0186**	**1.6456**	**0.5973**	**2.2429**	**0.2492**	**0.5633**	**0.8125**		**1,787.9484**	**1,787.9484**	**0.4210**		**1,796.7893**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1229	1.3547	1.5280	5.5700e-003	0.1325	0.0278	0.1603	0.0363	0.0256	0.0619		523.2714	523.2714	4.2100e-003		523.3598
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0255	0.0332	0.3536	1.2900e-003	0.1118	7.7000e-004	0.1126	0.0296	7.2000e-004	0.0304		90.9347	90.9347	4.0300e-003		91.0194
Total	**0.1484**	**1.3879**	**1.8817**	**6.8600e-003**	**0.2442**	**0.0286**	**0.2728**	**0.0659**	**0.0263**	**0.0922**		**614.2061**	**614.2061**	**8.2400e-003**		**614.3792**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.6456	0.0000	1.6456	0.2492	0.0000	0.2492			0.0000			0.0000
Off-Road	1.2048	12.6991	9.4469	0.0186		0.5973	0.5973		0.5633	0.5633	0.0000	1,787.9484	1,787.9484	0.4210		1,796.7893
Total	**1.2048**	**12.6991**	**9.4469**	**0.0186**	**1.6456**	**0.5973**	**2.2429**	**0.2492**	**0.5633**	**0.8125**	**0.0000**	**1,787.9484**	**1,787.9484**	**0.4210**		**1,796.7893**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day										lb/day					
Hauling	0.1229	1.3547	1.5280	5.5700e-003	0.1325	0.0278	0.1603	0.0363	0.0256	0.0619		523.2714	523.2714	4.2100e-003		523.3598
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0255	0.0332	0.3536	1.2900e-003	0.1118	7.7000e-004	0.1126	0.0296	7.2000e-004	0.0304		90.9347	90.9347	4.0300e-003		91.0194
Total	**0.1484**	**1.3879**	**1.8817**	**6.8600e-003**	**0.2442**	**0.0286**	**0.2728**	**0.0659**	**0.0263**	**0.0922**		**614.2061**	**614.2061**	**8.2400e-003**		**614.3792**

3.5 Trenching - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8368	7.8318	7.5533	0.0105		0.5024	0.5024		0.4636	0.4636		996.0796	996.0796	0.3090		1,002.5693
Total	**0.8368**	**7.8318**	**7.5533**	**0.0105**		**0.5024**	**0.5024**		**0.4636**	**0.4636**		**996.0796**	**996.0796**	**0.3090**		**1,002.5693**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0331	0.0431	0.4597	1.6800e-003	0.1453	1.0000e-003	0.1463	0.0385	9.3000e-004	0.0395		118.2152	118.2152	5.2400e-003		118.3252

Total	**0.0331**	**0.0431**	**0.4597**	**1.6800e-003**	**0.1453**	**1.0000e-003**	**0.1463**	**0.0385**	**9.3000e-004**	**0.0395**		**118.2152**	**118.2152**	**5.2400e-003**		**118.3252**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8368	7.8318	7.5533	0.0105		0.5024	0.5024		0.4636	0.4636	0.0000	996.0796	996.0796	0.3090		1,002.5693
Total	**0.8368**	**7.8318**	**7.5533**	**0.0105**		**0.5024**	**0.5024**		**0.4636**	**0.4636**	**0.0000**	**996.0796**	**996.0796**	**0.3090**		**1,002.5693**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0331	0.0431	0.4597	1.6800e-003	0.1453	1.0000e-003	0.1463	0.0385	9.3000e-004	0.0395		118.2152	118.2152	5.2400e-003		118.3252
Total	**0.0331**	**0.0431**	**0.4597**	**1.6800e-003**	**0.1453**	**1.0000e-003**	**0.1463**	**0.0385**	**9.3000e-004**	**0.0395**		**118.2152**	**118.2152**	**5.2400e-003**		**118.3252**

3.6 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1326	0.0000	0.1326	0.0143	0.0000	0.0143			0.0000			0.0000
Off-Road	0.2362	2.2190	3.3714	5.3200e-003		0.1076	0.1076		0.0990	0.0990		515.4193	515.4193	0.1667		518.9200
Total	**0.2362**	**2.2190**	**3.3714**	**5.3200e-003**	**0.1326**	**0.1076**	**0.2402**	**0.0143**	**0.0990**	**0.1133**		**515.4193**	**515.4193**	**0.1667**		**518.9200**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	7.6300e-003	9.9500e-003	0.1061	3.9000e-004	0.0335	2.3000e-004	0.0338	8.8900e-003	2.1000e-004	9.1100e-003		27.2804	27.2804	1.2100e-003		27.3058
Total	**7.6300e-003**	**9.9500e-003**	**0.1061**	**3.9000e-004**	**0.0335**	**2.3000e-004**	**0.0338**	**8.8900e-003**	**2.1000e-004**	**9.1100e-003**		**27.2804**	**27.2804**	**1.2100e-003**		**27.3058**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Fugitive Dust					0.1326	0.0000	0.1326	0.0143	0.0000	0.0143			0.0000			0.0000
Off-Road	0.2362	2.2190	3.3714	5.3200e-003		0.1076	0.1076		0.0990	0.0990	0.0000	515.4193	515.4193	0.1667		518.9200
Total	**0.2362**	**2.2190**	**3.3714**	**5.3200e-003**	**0.1326**	**0.1076**	**0.2402**	**0.0143**	**0.0990**	**0.1133**	**0.0000**	**515.4193**	**515.4193**	**0.1667**		**518.9200**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	7.6300e-003	9.9500e-003	0.1061	3.9000e-004	0.0335	2.3000e-004	0.0338	8.8900e-003	2.1000e-004	9.1100e-003		27.2804	27.2804	1.2100e-003		27.3058
Total	**7.6300e-003**	**9.9500e-003**	**0.1061**	**3.9000e-004**	**0.0335**	**2.3000e-004**	**0.0338**	**8.8900e-003**	**2.1000e-004**	**9.1100e-003**		**27.2804**	**27.2804**	**1.2100e-003**		**27.3058**

3.7 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1006	10.2700	9.9440	0.0159		0.5663	0.5663		0.5307	0.5307		1,512.4250	1,512.4250	0.3843		1,520.4943
Total	**1.1006**	**10.2700**	**9.9440**	**0.0159**		**0.5663**	**0.5663**		**0.5307**	**0.5307**		**1,512.4250**	**1,512.4250**	**0.3843**		**1,520.4943**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0207	0.1521	0.2984	6.4000e-004	0.0188	2.7000e-003	0.0215	5.3400e-003	2.4900e-003	7.8300e-003		60.0648	60.0648	4.6000e-004		60.0744
Worker	0.0229	0.0299	0.3183	1.1600e-003	0.1006	6.9000e-004	0.1013	0.0267	6.4000e-004	0.0273		81.8413	81.8413	3.6300e-003		81.9175
Total	**0.0436**	**0.1820**	**0.6167**	**1.8000e-003**	**0.1194**	**3.3900e-003**	**0.1228**	**0.0320**	**3.1300e-003**	**0.0352**		**141.9060**	**141.9060**	**4.0900e-003**		**141.9918**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1006	10.2700	9.9440	0.0159		0.5663	0.5663		0.5307	0.5307	0.0000	1,512.4250	1,512.4250	0.3843		1,520.4942
Total	**1.1006**	**10.2700**	**9.9440**	**0.0159**		**0.5663**	**0.5663**		**0.5307**	**0.5307**	**0.0000**	**1,512.4250**	**1,512.4250**	**0.3843**		**1,520.4942**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0207	0.1521	0.2984	6.4000e-004	0.0188	2.7000e-003	0.0215	5.3400e-003	2.4900e-003	7.8300e-003		60.0648	60.0648	4.6000e-004		60.0744
Worker	0.0229	0.0299	0.3183	1.1600e-003	0.1006	6.9000e-004	0.1013	0.0267	6.4000e-004	0.0273		81.8413	81.8413	3.6300e-003		81.9175
Total	**0.0436**	**0.1820**	**0.6167**	**1.8000e-003**	**0.1194**	**3.3900e-003**	**0.1228**	**0.0320**	**3.1300e-003**	**0.0352**		**141.9060**	**141.9060**	**4.0900e-003**		**141.9918**

3.7 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9856	9.1761	9.8181	0.0159		0.4754	0.4754		0.4458	0.4458		1,513.1475	1,513.1475	0.3823		1,521.1757
Total	**0.9856**	**9.1761**	**9.8181**	**0.0159**		**0.4754**	**0.4754**		**0.4458**	**0.4458**		**1,513.1475**	**1,513.1475**	**0.3823**		**1,521.1757**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0203	0.1381	0.2917	6.4000e-004	0.0188	2.6700e-003	0.0214	5.3400e-003	2.4600e-003	7.8000e-003		60.0143	60.0143	4.7000e-004		60.0241
Worker	0.0218	0.0282	0.3010	1.1600e-003	0.1006	7.0000e-004	0.1013	0.0267	6.5000e-004	0.0273		80.5072	80.5072	3.4900e-003		80.5805

Total	**0.0421**	**0.1663**	**0.5926**	**1.8000e-003**	**0.1194**	**3.3700e-003**	**0.1227**	**0.0320**	**3.1100e-003**	**0.0351**		**140.5215**	**140.5215**	**3.9600e-003**		**140.6045**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9856	9.1761	9.8181	0.0159		0.4754	0.4754		0.4458	0.4458	0.0000	1,513.1475	1,513.1475	0.3823		1,521.1757
Total	**0.9856**	**9.1761**	**9.8181**	**0.0159**		**0.4754**	**0.4754**		**0.4458**	**0.4458**	**0.0000**	**1,513.1475**	**1,513.1475**	**0.3823**		**1,521.1757**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0203	0.1381	0.2917	6.4000e-004	0.0188	2.6700e-003	0.0214	5.3400e-003	2.4600e-003	7.8000e-003		60.0143	60.0143	4.7000e-004		60.0241
Worker	0.0218	0.0282	0.3010	1.1600e-003	0.1006	7.0000e-004	0.1013	0.0267	6.5000e-004	0.0273		80.5072	80.5072	3.4900e-003		80.5805
Total	**0.0421**	**0.1663**	**0.5926**	**1.8000e-003**	**0.1194**	**3.3700e-003**	**0.1227**	**0.0320**	**3.1100e-003**	**0.0351**		**140.5215**	**140.5215**	**3.9600e-003**		**140.6045**

3.8 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	20.7173					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.8329
Total	**20.9218**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.8329**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	4.8500e-003	6.2600e-003	0.0669	2.6000e-004	0.0224	1.6000e-004	0.0225	5.9300e-003	1.4000e-004	6.0700e-003		17.8905	17.8905	7.8000e-004		17.9068
Total	**4.8500e-003**	**6.2600e-003**	**0.0669**	**2.6000e-004**	**0.0224**	**1.6000e-004**	**0.0225**	**5.9300e-003**	**1.4000e-004**	**6.0700e-003**		**17.8905**	**17.8905**	**7.8000e-004**		**17.9068**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Archit. Coating	20.7173					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.8329
Total	**20.9218**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.8329**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	4.8500e-003	6.2600e-003	0.0669	2.6000e-004	0.0224	1.6000e-004	0.0225	5.9300e-003	1.4000e-004	6.0700e-003		17.8905	17.8905	7.8000e-004		17.9068
Total	**4.8500e-003**	**6.2600e-003**	**0.0669**	**2.6000e-004**	**0.0224**	**1.6000e-004**	**0.0225**	**5.9300e-003**	**1.4000e-004**	**6.0700e-003**		**17.8905**	**17.8905**	**7.8000e-004**		**17.9068**

UNSCHEDULED CONSTRUCTION

Annual, Summer, and Winter Emissions

Automotive Technology Expansion

Orange County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	58.79	1000sqft	1.35	58,794.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment -

Off-road Equipment - modified

Off-road Equipment -

Off-road Equipment - modified

Grading - modified

Demolition -

Architectural Coating - modified

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	2.00	1.00
tblConstructionPhase	PhaseEndDate	2/12/2015	8/23/2022
tblConstructionPhase	PhaseStartDate	1/30/2015	8/10/2022
tblGrading	AcresOfGrading	3.00	0.50
tblOffRoadEquipment	LoadFactor	0.43	0.43
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.50	0.50
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Trenchers
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2023

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2022	0.0845	0.6551	0.7171	1.3400e-003	0.0330	0.0306	0.0636	6.8600e-003	0.0293	0.0362	0.0000	108.6140	108.6140	0.0173	0.0000	108.9773
2023	0.3744	0.7544	0.8982	1.7200e-003	0.0212	0.0328	0.0539	5.6900e-003	0.0316	0.0373	0.0000	137.7199	137.7199	0.0199	0.0000	138.1367
Total	**0.4589**	**1.4095**	**1.6152**	**3.0600e-003**	**0.0542**	**0.0634**	**0.1175**	**0.0126**	**0.0609**	**0.0735**	**0.0000**	**246.3339**	**246.3339**	**0.0372**	**0.0000**	**247.1140**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2022	0.0845	0.6551	0.7171	1.3400e-003	0.0330	0.0306	0.0636	6.8600e-003	0.0293	0.0362	0.0000	108.6139	108.6139	0.0173	0.0000	108.9772
2023	0.3744	0.7544	0.8982	1.7200e-003	0.0212	0.0328	0.0539	5.6900e-003	0.0316	0.0373	0.0000	137.7197	137.7197	0.0199	0.0000	138.1366
Total	**0.4589**	**1.4095**	**1.6152**	**3.0600e-003**	**0.0542**	**0.0634**	**0.1175**	**0.0126**	**0.0609**	**0.0735**	**0.0000**	**246.3336**	**246.3336**	**0.0372**	**0.0000**	**247.1138**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/29/2015	1/29/2015	5	1	
2	Demolition	Demolition	8/10/2022	8/23/2022	5	10	
3	Grading	Grading	8/24/2022	8/29/2022	5	4	
4	Trenching	Trenching	8/30/2022	9/12/2022	5	10	
5	Building Construction	Building Construction	9/13/2022	6/19/2023	5	200	
6	Paving	Paving	6/20/2023	7/3/2023	5	10	
7	Architectural Coating	Architectural Coating	7/4/2023	7/31/2023	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 88,191; Non-Residential Outdoor: 29,397 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	6.00	226	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Site Preparation	Graders	0	8.00	174	0.41
Paving	Pavers	0	6.00	125	0.42
Paving	Rollers	0	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Rubber Tired Dozers	0	6.00	255	0.40

Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Graders	1	6.00	174	0.41
Paving	Paving Equipment	1	8.00	130	0.36
Site Preparation	Rubber Tired Dozers	0	7.00	255	0.40
Building Construction	Welders	3	8.00	46	0.45
Grading	Crawler Tractors	1	6.00	208	0.43
Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Trenchers	1	8.00	80	0.50
Trenching	Plate Compactors	1	8.00	8	0.43

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	156.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	25.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0169	0.0000	0.0169	2.5500e-003	0.0000	2.5500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7100e-003	0.0740	0.0757	1.1000e-004		3.6300e-003	3.6300e-003		3.4000e-003	3.4000e-003	0.0000	9.3323	9.3323	2.3000e-003	0.0000	9.3805
Total	**7.7100e-003**	**0.0740**	**0.0757**	**1.1000e-004**	**0.0169**	**3.6300e-003**	**0.0205**	**2.5500e-003**	**3.4000e-003**	**5.9500e-003**	**0.0000**	**9.3323**	**9.3323**	**2.3000e-003**	**0.0000**	**9.3805**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.2400e-003	0.0129	0.0150	6.0000e-005	1.3400e-003	2.8000e-004	1.6200e-003	3.7000e-004	2.6000e-004	6.3000e-004	0.0000	4.8743	4.8743	4.0000e-005	0.0000	4.8751
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	1.6000e-004	1.7100e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4119	0.4119	2.0000e-005	0.0000	0.4123
Total	**1.3500e-003**	**0.0131**	**0.0167**	**7.0000e-005**	**1.8900e-003**	**2.8000e-004**	**2.1700e-003**	**5.2000e-004**	**2.6000e-004**	**7.8000e-004**	**0.0000**	**5.2862**	**5.2862**	**6.0000e-005**	**0.0000**	**5.2874**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0169	0.0000	0.0169	2.5500e-003	0.0000	2.5500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7100e-003	0.0740	0.0757	1.1000e-004		3.6300e-003	3.6300e-003		3.4000e-003	3.4000e-003	0.0000	9.3322	9.3322	2.3000e-003	0.0000	9.3804
Total	**7.7100e-003**	**0.0740**	**0.0757**	**1.1000e-004**	**0.0169**	**3.6300e-003**	**0.0205**	**2.5500e-003**	**3.4000e-003**	**5.9500e-003**	**0.0000**	**9.3322**	**9.3322**	**2.3000e-003**	**0.0000**	**9.3804**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Hauling	1.2400e-003	0.0129	0.0150	6.0000e-005	1.3400e-003	2.8000e-004	1.6200e-003	3.7000e-004	2.6000e-004	6.3000e-004	0.0000	4.8743	4.8743	4.0000e-005	0.0000	4.8751
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	1.6000e-004	1.7100e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4119	0.4119	2.0000e-005	0.0000	0.4123
Total	**1.3500e-003**	**0.0131**	**0.0167**	**7.0000e-005**	**1.8900e-003**	**2.8000e-004**	**2.1700e-003**	**5.2000e-004**	**2.6000e-004**	**7.8000e-004**	**0.0000**	**5.2862**	**5.2862**	**6.0000e-005**	**0.0000**	**5.2874**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8400e-003	0.0195	0.0139	3.0000e-005		9.2000e-004	9.2000e-004		8.5000e-004	8.5000e-004	0.0000	2.3082	2.3082	7.5000e-004	0.0000	2.3239
Total	**1.8400e-003**	**0.0195**	**0.0139**	**3.0000e-005**	**2.7000e-004**	**9.2000e-004**	**1.1900e-003**	**3.0000e-005**	**8.5000e-004**	**8.8000e-004**	**0.0000**	**2.3082**	**2.3082**	**7.5000e-004**	**0.0000**	**2.3239**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	5.0000e-005	5.5000e-004	0.0000	1.8000e-004	0.0000	1.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1318	0.1318	1.0000e-005	0.0000	0.1319

Total	**4.0000e-005**	**5.0000e-005**	**5.5000e-004**	**0.0000**	**1.8000e-004**	**0.0000**	**1.8000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1318**	**0.1318**	**1.0000e-005**	**0.0000**	**0.1319**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8400e-003	0.0195	0.0139	3.0000e-005		9.2000e-004	9.2000e-004		8.5000e-004	8.5000e-004	0.0000	2.3082	2.3082	7.5000e-004	0.0000	2.3239
Total	**1.8400e-003**	**0.0195**	**0.0139**	**3.0000e-005**	**2.7000e-004**	**9.2000e-004**	**1.1900e-003**	**3.0000e-005**	**8.5000e-004**	**8.8000e-004**	**0.0000**	**2.3082**	**2.3082**	**7.5000e-004**	**0.0000**	**2.3239**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	5.0000e-005	5.5000e-004	0.0000	1.8000e-004	0.0000	1.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1318	0.1318	1.0000e-005	0.0000	0.1319
Total	**4.0000e-005**	**5.0000e-005**	**5.5000e-004**	**0.0000**	**1.8000e-004**	**0.0000**	**1.8000e-004**	**5.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**0.1318**	**0.1318**	**1.0000e-005**	**0.0000**	**0.1319**

3.5 Trenching - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.7200e-003	0.0354	0.0367	5.0000e-005		2.1800e-003	2.1800e-003		2.0100e-003	2.0100e-003	0.0000	4.4068	4.4068	1.3900e-003	0.0000	4.4360
Total	**3.7200e-003**	**0.0354**	**0.0367**	**5.0000e-005**		**2.1800e-003**	**2.1800e-003**		**2.0100e-003**	**2.0100e-003**	**0.0000**	**4.4068**	**4.4068**	**1.3900e-003**	**0.0000**	**4.4360**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	1.6000e-004	1.7100e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4119	0.4119	2.0000e-005	0.0000	0.4123
Total	**1.1000e-004**	**1.6000e-004**	**1.7100e-003**	**1.0000e-005**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4119**	**0.4119**	**2.0000e-005**	**0.0000**	**0.4123**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Off-Road	3.7200e-003	0.0354	0.0367	5.0000e-005		2.1800e-003	2.1800e-003		2.0100e-003	2.0100e-003	0.0000	4.4068	4.4068	1.3900e-003	0.0000	4.4360
Total	**3.7200e-003**	**0.0354**	**0.0367**	**5.0000e-005**		**2.1800e-003**	**2.1800e-003**		**2.0100e-003**	**2.0100e-003**	**0.0000**	**4.4068**	**4.4068**	**1.3900e-003**	**0.0000**	**4.4360**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	1.6000e-004	1.7100e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4119	0.4119	2.0000e-005	0.0000	0.4123
Total	**1.1000e-004**	**1.6000e-004**	**1.7100e-003**	**1.0000e-005**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4119**	**0.4119**	**2.0000e-005**	**0.0000**	**0.4123**

3.6 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0649	0.4912	0.5015	8.7000e-004		0.0232	0.0232		0.0224	0.0224	0.0000	71.3978	71.3978	0.0124	0.0000	71.6579
Total	**0.0649**	**0.4912**	**0.5015**	**8.7000e-004**		**0.0232**	**0.0232**		**0.0224**	**0.0224**	**0.0000**	**71.3978**	**71.3978**	**0.0124**	**0.0000**	**71.6579**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.5800e-003	0.0185	0.0364	8.0000e-005	2.4300e-003	3.5000e-004	2.7800e-003	6.9000e-004	3.2000e-004	1.0200e-003	0.0000	7.2041	7.2041	5.0000e-005	0.0000	7.2053
Worker	2.2300e-003	3.1800e-003	0.0338	1.3000e-004	0.0108	8.0000e-005	0.0109	2.8800e-003	7.0000e-005	2.9500e-003	0.0000	8.1350	8.1350	3.5000e-004	0.0000	8.1423
Total	**4.8100e-003**	**0.0217**	**0.0702**	**2.1000e-004**	**0.0133**	**4.3000e-004**	**0.0137**	**3.5700e-003**	**3.9000e-004**	**3.9700e-003**	**0.0000**	**15.3391**	**15.3391**	**4.0000e-004**	**0.0000**	**15.3476**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0649	0.4912	0.5015	8.7000e-004		0.0232	0.0232		0.0224	0.0224	0.0000	71.3977	71.3977	0.0124	0.0000	71.6578
Total	**0.0649**	**0.4912**	**0.5015**	**8.7000e-004**		**0.0232**	**0.0232**		**0.0224**	**0.0224**	**0.0000**	**71.3977**	**71.3977**	**0.0124**	**0.0000**	**71.6578**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.5800e-003	0.0185	0.0364	8.0000e-005	2.4300e-003	3.5000e-004	2.7800e-003	6.9000e-004	3.2000e-004	1.0200e-003	0.0000	7.2041	7.2041	5.0000e-005	0.0000	7.2053
Worker	2.2300e-003	3.1800e-003	0.0338	1.3000e-004	0.0108	8.0000e-005	0.0109	2.8800e-003	7.0000e-005	2.9500e-003	0.0000	8.1350	8.1350	3.5000e-004	0.0000	8.1423
Total	**4.8100e-003**	**0.0217**	**0.0702**	**2.1000e-004**	**0.0133**	**4.3000e-004**	**0.0137**	**3.5700e-003**	**3.9000e-004**	**3.9700e-003**	**0.0000**	**15.3391**	**15.3391**	**4.0000e-004**	**0.0000**	**15.3476**

3.6 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0918	0.7047	0.7612	1.3300e-003		0.0310	0.0310		0.0299	0.0299	0.0000	109.3696	109.3696	0.0185	0.0000	109.7580
Total	**0.0918**	**0.7047**	**0.7612**	**1.3300e-003**		**0.0310**	**0.0310**		**0.0299**	**0.0299**	**0.0000**	**109.3696**	**109.3696**	**0.0185**	**0.0000**	**109.7580**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.6600e-003	0.0225	0.0536	1.3000e-004	3.7300e-003	5.3000e-004	4.2600e-003	1.0600e-003	4.9000e-004	1.5500e-003	0.0000	10.9814	10.9814	8.0000e-005	0.0000	10.9829
Worker	3.2600e-003	4.6100e-003	0.0491	2.0000e-004	0.0166	1.2000e-004	0.0167	4.4100e-003	1.1000e-004	4.5200e-003	0.0000	12.2731	12.2731	5.1000e-004	0.0000	12.2839

Total	**6.9200e-003**	**0.0272**	**0.1027**	**3.3000e-004**	**0.0203**	**6.5000e-004**	**0.0210**	**5.4700e-003**	**6.0000e-004**	**6.0700e-003**	**0.0000**	**23.2544**	**23.2544**	**5.9000e-004**	**0.0000**	**23.2668**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0918	0.7047	0.7612	1.3300e-003		0.0310	0.0310		0.0299	0.0299	0.0000	109.3694	109.3694	0.0185	0.0000	109.7579
Total	**0.0918**	**0.7047**	**0.7612**	**1.3300e-003**		**0.0310**	**0.0310**		**0.0299**	**0.0299**	**0.0000**	**109.3694**	**109.3694**	**0.0185**	**0.0000**	**109.7579**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.6600e-003	0.0225	0.0536	1.3000e-004	3.7300e-003	5.3000e-004	4.2600e-003	1.0600e-003	4.9000e-004	1.5500e-003	0.0000	10.9814	10.9814	8.0000e-005	0.0000	10.9829
Worker	3.2600e-003	4.6100e-003	0.0491	2.0000e-004	0.0166	1.2000e-004	0.0167	4.4100e-003	1.1000e-004	4.5200e-003	0.0000	12.2731	12.2731	5.1000e-004	0.0000	12.2839
Total	**6.9200e-003**	**0.0272**	**0.1027**	**3.3000e-004**	**0.0203**	**6.5000e-004**	**0.0210**	**5.4700e-003**	**6.0000e-004**	**6.0700e-003**	**0.0000**	**23.2544**	**23.2544**	**5.9000e-004**	**0.0000**	**23.2668**

3.7 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.0600e-003	9.2700e-003	0.0138	2.0000e-005		4.4000e-004	4.4000e-004		4.1000e-004	4.1000e-004	0.0000	1.9340	1.9340	5.9000e-004	0.0000	1.9464
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.0600e-003**	**9.2700e-003**	**0.0138**	**2.0000e-005**		**4.4000e-004**	**4.4000e-004**		**4.1000e-004**	**4.1000e-004**	**0.0000**	**1.9340**	**1.9340**	**5.9000e-004**	**0.0000**	**1.9464**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	8.0000e-005	8.1000e-004	0.0000	2.7000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2029	0.2029	1.0000e-005	0.0000	0.2030
Total	**5.0000e-005**	**8.0000e-005**	**8.1000e-004**	**0.0000**	**2.7000e-004**	**0.0000**	**2.8000e-004**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**0.0000**	**0.2029**	**0.2029**	**1.0000e-005**	**0.0000**	**0.2030**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Off-Road	1.0600e-003	9.2700e-003	0.0138	2.0000e-005		4.4000e-004	4.4000e-004		4.1000e-004	4.1000e-004	0.0000	1.9340	1.9340	5.9000e-004	0.0000	1.9464
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.0600e-003**	**9.2700e-003**	**0.0138**	**2.0000e-005**		**4.4000e-004**	**4.4000e-004**		**4.1000e-004**	**4.1000e-004**	**0.0000**	**1.9340**	**1.9340**	**5.9000e-004**	**0.0000**	**1.9464**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	8.0000e-005	8.1000e-004	0.0000	2.7000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2029	0.2029	1.0000e-005	0.0000	0.2030
Total	**5.0000e-005**	**8.0000e-005**	**8.1000e-004**	**0.0000**	**2.7000e-004**	**0.0000**	**2.8000e-004**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**0.0000**	**0.2029**	**0.2029**	**1.0000e-005**	**0.0000**	**0.2030**

3.8 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2725					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9200e-003	0.0130	0.0181	3.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004	0.0000	2.5533	2.5533	1.5000e-004	0.0000	2.5565
Total	**0.2744**	**0.0130**	**0.0181**	**3.0000e-005**		**7.1000e-004**	**7.1000e-004**		**7.1000e-004**	**7.1000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.5000e-004**	**0.0000**	**2.5565**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	1.5000e-004	1.6200e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4057	0.4057	2.0000e-005	0.0000	0.4061
Total	**1.1000e-004**	**1.5000e-004**	**1.6200e-003**	**1.0000e-005**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4057**	**0.4057**	**2.0000e-005**	**0.0000**	**0.4061**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2725					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9200e-003	0.0130	0.0181	3.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004	0.0000	2.5533	2.5533	1.5000e-004	0.0000	2.5565
Total	**0.2744**	**0.0130**	**0.0181**	**3.0000e-005**		**7.1000e-004**	**7.1000e-004**		**7.1000e-004**	**7.1000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.5000e-004**	**0.0000**	**2.5565**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	1.5000e-004	1.6200e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4057	0.4057	2.0000e-005	0.0000	0.4061
Total	**1.1000e-004**	**1.5000e-004**	**1.6200e-003**	**1.0000e-005**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4057**	**0.4057**	**2.0000e-005**	**0.0000**	**0.4061**

Automotive Technology Expansion

Orange County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	58.79	1000sqft	1.35	58,794.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment -

Off-road Equipment - modified

Off-road Equipment -

Off-road Equipment - modified

Grading - modified

Demolition -

Architectural Coating - modified

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	2.00	1.00
tblConstructionPhase	PhaseEndDate	2/12/2015	8/23/2022
tblConstructionPhase	PhaseStartDate	1/30/2015	8/10/2022
tblGrading	AcresOfGrading	3.00	0.50
tblOffRoadEquipment	LoadFactor	0.43	0.43
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.50	0.50
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Trenchers
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2023

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2022	1.8065	17.2856	18.1598	0.0342	3.7540	0.7832	4.5372	0.6144	0.7326	1.3470	0.0000	3,227.5591	3,227.5591	0.5186	0.0000	3,238.4503
2023	27.4537	12.0752	14.1816	0.0275	0.3420	0.5226	0.8646	0.0919	0.5043	0.5962	0.0000	2,426.1874	2,426.1874	0.3477	0.0000	2,433.4888
Total	**29.2602**	**29.3607**	**32.3414**	**0.0617**	**4.0960**	**1.3058**	**5.4018**	**0.7063**	**1.2369**	**1.9432**	**0.0000**	**5,653.7465**	**5,653.7465**	**0.8663**	**0.0000**	**5,671.9391**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2022	1.8065	17.2856	18.1598	0.0342	3.7540	0.7832	4.5372	0.6144	0.7326	1.3470	0.0000	3,227.5591	3,227.5591	0.5186	0.0000	3,238.4503
2023	27.4537	12.0752	14.1816	0.0275	0.3420	0.5226	0.8646	0.0919	0.5043	0.5962	0.0000	2,426.1874	2,426.1874	0.3477	0.0000	2,433.4888
Total	**29.2602**	**29.3607**	**32.3414**	**0.0617**	**4.0960**	**1.3058**	**5.4018**	**0.7063**	**1.2369**	**1.9432**	**0.0000**	**5,653.7465**	**5,653.7465**	**0.8663**	**0.0000**	**5,671.9391**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/29/2015	1/29/2015	5	1	
2	Demolition	Demolition	8/10/2022	8/23/2022	5	10	
3	Grading	Grading	8/24/2022	8/29/2022	5	4	
4	Trenching	Trenching	8/30/2022	9/12/2022	5	10	
5	Building Construction	Building Construction	9/13/2022	6/19/2023	5	200	
6	Paving	Paving	6/20/2023	7/3/2023	5	10	
7	Architectural Coating	Architectural Coating	7/4/2023	7/31/2023	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 88,191; Non-Residential Outdoor: 29,397 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	6.00	226	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Site Preparation	Graders	0	8.00	174	0.41
Paving	Pavers	0	6.00	125	0.42
Paving	Rollers	0	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Rubber Tired Dozers	0	6.00	255	0.40

Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Graders	1	6.00	174	0.41
Paving	Paving Equipment	1	8.00	130	0.36
Site Preparation	Rubber Tired Dozers	0	7.00	255	0.40
Building Construction	Welders	3	8.00	46	0.45
Grading	Crawler Tractors	1	6.00	208	0.43
Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Trenchers	1	8.00	80	0.50
Trenching	Plate Compactors	1	8.00	8	0.43

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	156.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	25.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3703	0.0000	3.3703	0.5103	0.0000	0.5103			0.0000			0.0000
Off-Road	1.5413	14.8014	15.1473	0.0214		0.7260	0.7260		0.6800	0.6800		2,057.4090	2,057.4090	0.5061		2,068.0362
Total	**1.5413**	**14.8014**	**15.1473**	**0.0214**	**3.3703**	**0.7260**	**4.0964**	**0.5103**	**0.6800**	**1.1903**		**2,057.4090**	**2,057.4090**	**0.5061**		**2,068.0362**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2421	2.4556	2.6528	0.0114	0.2719	0.0564	0.3283	0.0745	0.0519	0.1264		1,075.6680	1,075.6680	8.7000e-003		1,075.8506
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0231	0.0285	0.3597	1.3600e-003	0.1118	7.8000e-004	0.1126	0.0296	7.2000e-004	0.0304		94.4821	94.4821	3.8800e-003		94.5635
Total	**0.2652**	**2.4841**	**3.0125**	**0.0128**	**0.3837**	**0.0572**	**0.4409**	**0.1041**	**0.0526**	**0.1567**		**1,170.1501**	**1,170.1501**	**0.0126**		**1,170.4141**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3703	0.0000	3.3703	0.5103	0.0000	0.5103			0.0000			0.0000
Off-Road	1.5413	14.8014	15.1473	0.0214		0.7260	0.7260		0.6800	0.6800	0.0000	2,057.4090	2,057.4090	0.5061		2,068.0362
Total	**1.5413**	**14.8014**	**15.1473**	**0.0214**	**3.3703**	**0.7260**	**4.0964**	**0.5103**	**0.6800**	**1.1903**	**0.0000**	**2,057.4090**	**2,057.4090**	**0.5061**		**2,068.0362**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day				
Hauling	0.2421	2.4556	2.6528	0.0114	0.2719	0.0564	0.3283	0.0745	0.0519	0.1264		1,075.6680	1,075.6680	8.7000e-003		1,075.8506
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0231	0.0285	0.3597	1.3600e-003	0.1118	7.8000e-004	0.1126	0.0296	7.2000e-004	0.0304		94.4821	94.4821	3.8800e-003		94.5635
Total	**0.2652**	**2.4841**	**3.0125**	**0.0128**	**0.3837**	**0.0572**	**0.4409**	**0.1041**	**0.0526**	**0.1567**		**1,170.1501**	**1,170.1501**	**0.0126**		**1,170.4141**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1326	0.0000	0.1326	0.0143	0.0000	0.0143			0.0000			0.0000
Off-Road	0.9206	9.7672	6.9529	0.0131		0.4616	0.4616		0.4247	0.4247		1,272.1658	1,272.1658	0.4114		1,280.8061
Total	**0.9206**	**9.7672**	**6.9529**	**0.0131**	**0.1326**	**0.4616**	**0.5941**	**0.0143**	**0.4247**	**0.4390**		**1,272.1658**	**1,272.1658**	**0.4114**		**1,280.8061**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0185	0.0228	0.2878	1.0900e-003	0.0894	6.2000e-004	0.0900	0.0237	5.8000e-004	0.0243		75.5857	75.5857	3.1000e-003		75.6508

Total	**0.0185**	**0.0228**	**0.2878**	**1.0900e-003**	**0.0894**	**6.2000e-004**	**0.0900**	**0.0237**	**5.8000e-004**	**0.0243**		**75.5857**	**75.5857**	**3.1000e-003**		**75.6508**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1326	0.0000	0.1326	0.0143	0.0000	0.0143			0.0000			0.0000
Off-Road	0.9206	9.7672	6.9529	0.0131		0.4616	0.4616		0.4247	0.4247	0.0000	1,272.1658	1,272.1658	0.4114		1,280.8061
Total	**0.9206**	**9.7672**	**6.9529**	**0.0131**	**0.1326**	**0.4616**	**0.5941**	**0.0143**	**0.4247**	**0.4390**	**0.0000**	**1,272.1658**	**1,272.1658**	**0.4114**		**1,280.8061**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0185	0.0228	0.2878	1.0900e-003	0.0894	6.2000e-004	0.0900	0.0237	5.8000e-004	0.0243		75.5857	75.5857	3.1000e-003		75.6508
Total	**0.0185**	**0.0228**	**0.2878**	**1.0900e-003**	**0.0894**	**6.2000e-004**	**0.0900**	**0.0237**	**5.8000e-004**	**0.0243**		**75.5857**	**75.5857**	**3.1000e-003**		**75.6508**

3.5 Trenching - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7432	7.0727	7.3471	0.0102		0.4361	0.4361		0.4020	0.4020		971.5242	971.5242	0.3066		977.9636
Total	**0.7432**	**7.0727**	**7.3471**	**0.0102**		**0.4361**	**0.4361**		**0.4020**	**0.4020**		**971.5242**	**971.5242**	**0.3066**		**977.9636**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0231	0.0285	0.3597	1.3600e-003	0.1118	7.8000e-004	0.1126	0.0296	7.2000e-004	0.0304		94.4821	94.4821	3.8800e-003		94.5635
Total	**0.0231**	**0.0285**	**0.3597**	**1.3600e-003**	**0.1118**	**7.8000e-004**	**0.1126**	**0.0296**	**7.2000e-004**	**0.0304**		**94.4821**	**94.4821**	**3.8800e-003**		**94.5635**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	0.7432	7.0727	7.3471	0.0102		0.4361	0.4361		0.4020	0.4020	0.0000	971.5242	971.5242	0.3066		977.9636
Total	**0.7432**	**7.0727**	**7.3471**	**0.0102**		**0.4361**	**0.4361**		**0.4020**	**0.4020**	**0.0000**	**971.5242**	**971.5242**	**0.3066**		**977.9636**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0231	0.0285	0.3597	1.3600e-003	0.1118	7.8000e-004	0.1126	0.0296	7.2000e-004	0.0304		94.4821	94.4821	3.8800e-003		94.5635
Total	**0.0231**	**0.0285**	**0.3597**	**1.3600e-003**	**0.1118**	**7.8000e-004**	**0.1126**	**0.0296**	**7.2000e-004**	**0.0304**		**94.4821**	**94.4821**	**3.8800e-003**		**94.5635**

3.6 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6426	12.4351	12.6957	0.0220		0.5861	0.5861		0.5663	0.5663		1,992.4709	1,992.4709	0.3457		1,999.7301
Total	**1.6426**	**12.4351**	**12.6957**	**0.0220**		**0.5861**	**0.5861**		**0.5663**	**0.5663**		**1,992.4709**	**1,992.4709**	**0.3457**		**1,999.7301**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0622	0.4507	0.7787	2.1500e-003	0.0625	8.8300e-003	0.0714	0.0178	8.1300e-003	0.0259		201.7621	201.7621	1.5000e-003		201.7937
Worker	0.0579	0.0712	0.8994	3.4100e-003	0.2794	1.9400e-003	0.2814	0.0741	1.8000e-003	0.0759		236.2052	236.2052	9.6900e-003		236.4087
Total	**0.1200**	**0.5219**	**1.6781**	**5.5600e-003**	**0.3420**	**0.0108**	**0.3527**	**0.0919**	**9.9300e-003**	**0.1019**		**437.9674**	**437.9674**	**0.0112**		**438.2024**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6426	12.4351	12.6957	0.0220		0.5861	0.5861		0.5663	0.5663	0.0000	1,992.4709	1,992.4709	0.3457		1,999.7301
Total	**1.6426**	**12.4351**	**12.6957**	**0.0220**		**0.5861**	**0.5861**		**0.5663**	**0.5663**	**0.0000**	**1,992.4709**	**1,992.4709**	**0.3457**		**1,999.7301**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0622	0.4507	0.7787	2.1500e-003	0.0625	8.8300e-003	0.0714	0.0178	8.1300e-003	0.0259		201.7621	201.7621	1.5000e-003		201.7937
Worker	0.0579	0.0712	0.8994	3.4100e-003	0.2794	1.9400e-003	0.2814	0.0741	1.8000e-003	0.0759		236.2052	236.2052	9.6900e-003		236.4087
Total	**0.1200**	**0.5219**	**1.6781**	**5.5600e-003**	**0.3420**	**0.0108**	**0.3527**	**0.0919**	**9.9300e-003**	**0.1019**		**437.9674**	**437.9674**	**0.0112**		**438.2024**

3.6 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5176	11.6484	12.5813	0.0220		0.5119	0.5119		0.4944	0.4944		1,992.7159	1,992.7159	0.3370		1,999.7927
Total	**1.5176**	**11.6484**	**12.5813**	**0.0220**		**0.5119**	**0.5119**		**0.4944**	**0.4944**		**1,992.7159**	**1,992.7159**	**0.3370**		**1,999.7927**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0575	0.3593	0.7464	2.1400e-003	0.0625	8.7200e-003	0.0713	0.0178	8.0200e-003	0.0258		200.8008	200.8008	1.3500e-003		200.8291
Worker	0.0552	0.0675	0.8539	3.4100e-003	0.2794	1.9600e-003	0.2814	0.0741	1.8200e-003	0.0759		232.6707	232.6707	9.3500e-003		232.8669

Total	**0.1126**	**0.4267**	**1.6003**	**5.5500e-003**	**0.3420**	**0.0107**	**0.3527**	**0.0919**	**9.8400e-003**	**0.1018**		**433.4714**	**433.4714**	**0.0107**		**433.6961**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5176	11.6484	12.5813	0.0220		0.5119	0.5119		0.4944	0.4944	0.0000	1,992.7159	1,992.7159	0.3370		1,999.7927
Total	**1.5176**	**11.6484**	**12.5813**	**0.0220**		**0.5119**	**0.5119**		**0.4944**	**0.4944**	**0.0000**	**1,992.7159**	**1,992.7159**	**0.3370**		**1,999.7927**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0575	0.3593	0.7464	2.1400e-003	0.0625	8.7200e-003	0.0713	0.0178	8.0200e-003	0.0258		200.8008	200.8008	1.3500e-003		200.8291
Worker	0.0552	0.0675	0.8539	3.4100e-003	0.2794	1.9600e-003	0.2814	0.0741	1.8200e-003	0.0759		232.6707	232.6707	9.3500e-003		232.8669
Total	**0.1126**	**0.4267**	**1.6003**	**5.5500e-003**	**0.3420**	**0.0107**	**0.3527**	**0.0919**	**9.8400e-003**	**0.1018**		**433.4714**	**433.4714**	**0.0107**		**433.6961**

3.7 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2122	1.8548	2.7493	4.5500e-003		0.0875	0.0875		0.0814	0.0814		426.3775	426.3775	0.1296		429.0987
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2122**	**1.8548**	**2.7493**	**4.5500e-003**		**0.0875**	**0.0875**		**0.0814**	**0.0814**		**426.3775**	**426.3775**	**0.1296**		**429.0987**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0110	0.0135	0.1708	6.8000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.6000e-004	0.0152		46.5341	46.5341	1.8700e-003		46.5734
Total	**0.0110**	**0.0135**	**0.1708**	**6.8000e-004**	**0.0559**	**3.9000e-004**	**0.0563**	**0.0148**	**3.6000e-004**	**0.0152**		**46.5341**	**46.5341**	**1.8700e-003**		**46.5734**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	0.2122	1.8548	2.7493	4.5500e-003		0.0875	0.0875		0.0814	0.0814	0.0000	426.3775	426.3775	0.1296		429.0987
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2122**	**1.8548**	**2.7493**	**4.5500e-003**		**0.0875**	**0.0875**		**0.0814**	**0.0814**	**0.0000**	**426.3775**	**426.3775**	**0.1296**		**429.0987**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0110	0.0135	0.1708	6.8000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.6000e-004	0.0152		46.5341	46.5341	1.8700e-003		46.5734
Total	**0.0110**	**0.0135**	**0.1708**	**6.8000e-004**	**0.0559**	**3.9000e-004**	**0.0563**	**0.0148**	**3.6000e-004**	**0.0152**		**46.5341**	**46.5341**	**1.8700e-003**		**46.5734**

3.8 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	27.2510					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8017
Total	**27.4427**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8017**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0110	0.0135	0.1708	6.8000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.6000e-004	0.0152		46.5341	46.5341	1.8700e-003		46.5734
Total	**0.0110**	**0.0135**	**0.1708**	**6.8000e-004**	**0.0559**	**3.9000e-004**	**0.0563**	**0.0148**	**3.6000e-004**	**0.0152**		**46.5341**	**46.5341**	**1.8700e-003**		**46.5734**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	27.2510					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8017
Total	**27.4427**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8017**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000	
Worker	0.0110	0.0135	0.1708	6.8000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.6000e-004	0.0152		46.5341	46.5341	1.8700e-003		46.5734	
Total	**0.0110**	**0.0135**	**0.1708**	**6.8000e-004**	**0.0559**	**3.9000e-004**	**0.0563**	**0.0148**	**3.6000e-004**	**0.0152**		**46.5341**	**46.5341**	**1.8700e-003**		**46.5734**	

Automotive Technology Expansion

Orange County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	58.79	1000sqft	1.35	58,794.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment -

Off-road Equipment - modified

Off-road Equipment -

Off-road Equipment - modified

Grading - modified

Demolition -

Architectural Coating - modified

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	2.00	1.00
tblConstructionPhase	PhaseEndDate	2/12/2015	8/23/2022
tblConstructionPhase	PhaseStartDate	1/30/2015	8/10/2022
tblGrading	AcresOfGrading	3.00	0.50
tblOffRoadEquipment	LoadFactor	0.43	0.43
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.50	0.50
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Trenchers
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2023

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2022	1.8179	17.3716	18.5931	0.0341	3.7540	0.7833	4.5374	0.6144	0.7327	1.3471	0.0000	3,219.9630	3,219.9630	0.5188	0.0000	3,230.8570
2023	27.4543	12.0880	14.3093	0.0273	0.3420	0.5227	0.8646	0.0919	0.5044	0.5963	0.0000	2,412.0750	2,412.0750	0.3477	0.0000	2,419.3776
Total	**29.2722**	**29.4596**	**32.9023**	**0.0614**	**4.0960**	**1.3060**	**5.4020**	**0.7063**	**1.2370**	**1.9434**	**0.0000**	**5,632.0380**	**5,632.0380**	**0.8665**	**0.0000**	**5,650.2346**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2022	1.8179	17.3716	18.5931	0.0341	3.7540	0.7833	4.5374	0.6144	0.7327	1.3471	0.0000	3,219.9630	3,219.9630	0.5188	0.0000	3,230.8570
2023	27.4543	12.0880	14.3093	0.0273	0.3420	0.5227	0.8646	0.0919	0.5044	0.5963	0.0000	2,412.0750	2,412.0750	0.3477	0.0000	2,419.3776
Total	**29.2722**	**29.4596**	**32.9023**	**0.0614**	**4.0960**	**1.3060**	**5.4020**	**0.7063**	**1.2370**	**1.9434**	**0.0000**	**5,632.0380**	**5,632.0380**	**0.8665**	**0.0000**	**5,650.2346**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/29/2015	1/29/2015	5	1	
2	Demolition	Demolition	8/10/2022	8/23/2022	5	10	
3	Grading	Grading	8/24/2022	8/29/2022	5	4	
4	Trenching	Trenching	8/30/2022	9/12/2022	5	10	
5	Building Construction	Building Construction	9/13/2022	6/19/2023	5	200	
6	Paving	Paving	6/20/2023	7/3/2023	5	10	
7	Architectural Coating	Architectural Coating	7/4/2023	7/31/2023	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 88,191; Non-Residential Outdoor: 29,397 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	6.00	226	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Site Preparation	Graders	0	8.00	174	0.41
Paving	Pavers	0	6.00	125	0.42
Paving	Rollers	0	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Rubber Tired Dozers	0	6.00	255	0.40

Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Graders	1	6.00	174	0.41
Paving	Paving Equipment	1	8.00	130	0.36
Site Preparation	Rubber Tired Dozers	0	7.00	255	0.40
Building Construction	Welders	3	8.00	46	0.45
Grading	Crawler Tractors	1	6.00	208	0.43
Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Trenchers	1	8.00	80	0.50
Trenching	Plate Compactors	1	8.00	8	0.43

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	156.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	25.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3703	0.0000	3.3703	0.5103	0.0000	0.5103			0.0000			0.0000
Off-Road	1.5413	14.8014	15.1473	0.0214		0.7260	0.7260		0.6800	0.6800		2,057.4090	2,057.4090	0.5061		2,068.0362
Total	**1.5413**	**14.8014**	**15.1473**	**0.0214**	**3.3703**	**0.7260**	**4.0964**	**0.5103**	**0.6800**	**1.1903**		**2,057.4090**	**2,057.4090**	**0.5061**		**2,068.0362**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2524	2.5389	3.1113	0.0114	0.2719	0.0565	0.3284	0.0745	0.0520	0.1265		1,073.1015	1,073.1015	8.8300e-003		1,073.2870
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0243	0.0313	0.3344	1.2900e-003	0.1118	7.8000e-004	0.1126	0.0296	7.2000e-004	0.0304		89.4525	89.4525	3.8800e-003		89.5338
Total	**0.2767**	**2.5702**	**3.4457**	**0.0127**	**0.3837**	**0.0573**	**0.4410**	**0.1041**	**0.0527**	**0.1568**		**1,162.5540**	**1,162.5540**	**0.0127**		**1,162.8208**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3703	0.0000	3.3703	0.5103	0.0000	0.5103			0.0000			0.0000
Off-Road	1.5413	14.8014	15.1473	0.0214		0.7260	0.7260		0.6800	0.6800	0.0000	2,057.4090	2,057.4090	0.5061		2,068.0362
Total	**1.5413**	**14.8014**	**15.1473**	**0.0214**	**3.3703**	**0.7260**	**4.0964**	**0.5103**	**0.6800**	**1.1903**	**0.0000**	**2,057.4090**	**2,057.4090**	**0.5061**		**2,068.0362**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day										lb/day					
Hauling	0.2524	2.5389	3.1113	0.0114	0.2719	0.0565	0.3284	0.0745	0.0520	0.1265		1,073.1015	1,073.1015	8.8300e-003		1,073.2870
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0243	0.0313	0.3344	1.2900e-003	0.1118	7.8000e-004	0.1126	0.0296	7.2000e-004	0.0304		89.4525	89.4525	3.8800e-003		89.5338
Total	**0.2767**	**2.5702**	**3.4457**	**0.0127**	**0.3837**	**0.0573**	**0.4410**	**0.1041**	**0.0527**	**0.1568**		**1,162.5540**	**1,162.5540**	**0.0127**		**1,162.8208**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1326	0.0000	0.1326	0.0143	0.0000	0.0143			0.0000			0.0000
Off-Road	0.9206	9.7672	6.9529	0.0131		0.4616	0.4616		0.4247	0.4247		1,272.1658	1,272.1658	0.4114		1,280.8061
Total	**0.9206**	**9.7672**	**6.9529**	**0.0131**	**0.1326**	**0.4616**	**0.5941**	**0.0143**	**0.4247**	**0.4390**		**1,272.1658**	**1,272.1658**	**0.4114**		**1,280.8061**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0194	0.0250	0.2675	1.0300e-003	0.0894	6.2000e-004	0.0900	0.0237	5.8000e-004	0.0243		71.5620	71.5620	3.1000e-003		71.6271

Total	**0.0194**	**0.0250**	**0.2675**	**1.0300e-003**	**0.0894**	**6.2000e-004**	**0.0900**	**0.0237**	**5.8000e-004**	**0.0243**		**71.5620**	**71.5620**	**3.1000e-003**		**71.6271**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1326	0.0000	0.1326	0.0143	0.0000	0.0143			0.0000			0.0000
Off-Road	0.9206	9.7672	6.9529	0.0131		0.4616	0.4616		0.4247	0.4247	0.0000	1,272.1658	1,272.1658	0.4114		1,280.8061
Total	**0.9206**	**9.7672**	**6.9529**	**0.0131**	**0.1326**	**0.4616**	**0.5941**	**0.0143**	**0.4247**	**0.4390**	**0.0000**	**1,272.1658**	**1,272.1658**	**0.4114**		**1,280.8061**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0194	0.0250	0.2675	1.0300e-003	0.0894	6.2000e-004	0.0900	0.0237	5.8000e-004	0.0243		71.5620	71.5620	3.1000e-003		71.6271
Total	**0.0194**	**0.0250**	**0.2675**	**1.0300e-003**	**0.0894**	**6.2000e-004**	**0.0900**	**0.0237**	**5.8000e-004**	**0.0243**		**71.5620**	**71.5620**	**3.1000e-003**		**71.6271**

3.5 Trenching - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7432	7.0727	7.3471	0.0102		0.4361	0.4361		0.4020	0.4020		971.5242	971.5242	0.3066		977.9636
Total	**0.7432**	**7.0727**	**7.3471**	**0.0102**		**0.4361**	**0.4361**		**0.4020**	**0.4020**		**971.5242**	**971.5242**	**0.3066**		**977.9636**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0243	0.0313	0.3344	1.2900e-003	0.1118	7.8000e-004	0.1126	0.0296	7.2000e-004	0.0304		89.4525	89.4525	3.8800e-003		89.5338
Total	**0.0243**	**0.0313**	**0.3344**	**1.2900e-003**	**0.1118**	**7.8000e-004**	**0.1126**	**0.0296**	**7.2000e-004**	**0.0304**		**89.4525**	**89.4525**	**3.8800e-003**		**89.5338**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	0.7432	7.0727	7.3471	0.0102		0.4361	0.4361		0.4020	0.4020	0.0000	971.5242	971.5242	0.3066		977.9636
Total	**0.7432**	**7.0727**	**7.3471**	**0.0102**		**0.4361**	**0.4361**		**0.4020**	**0.4020**	**0.0000**	**971.5242**	**971.5242**	**0.3066**		**977.9636**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0243	0.0313	0.3344	1.2900e-003	0.1118	7.8000e-004	0.1126	0.0296	7.2000e-004	0.0304		89.4525	89.4525	3.8800e-003		89.5338
Total	**0.0243**	**0.0313**	**0.3344**	**1.2900e-003**	**0.1118**	**7.8000e-004**	**0.1126**	**0.0296**	**7.2000e-004**	**0.0304**		**89.4525**	**89.4525**	**3.8800e-003**		**89.5338**

3.6 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6426	12.4351	12.6957	0.0220		0.5861	0.5861		0.5663	0.5663		1,992.4709	1,992.4709	0.3457		1,999.7301
Total	**1.6426**	**12.4351**	**12.6957**	**0.0220**		**0.5861**	**0.5861**		**0.5663**	**0.5663**		**1,992.4709**	**1,992.4709**	**0.3457**		**1,999.7301**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0675	0.4603	0.9723	2.1400e-003	0.0625	8.9100e-003	0.0714	0.0178	8.1900e-003	0.0260		200.0475	200.0475	1.5600e-003		200.0803
Worker	0.0606	0.0782	0.8360	3.2300e-003	0.2794	1.9400e-003	0.2814	0.0741	1.8000e-003	0.0759		223.6311	223.6311	9.6900e-003		223.8346
Total	**0.1281**	**0.5386**	**1.8083**	**5.3700e-003**	**0.3420**	**0.0109**	**0.3528**	**0.0919**	**9.9900e-003**	**0.1019**		**423.6786**	**423.6786**	**0.0113**		**423.9148**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6426	12.4351	12.6957	0.0220		0.5861	0.5861		0.5663	0.5663	0.0000	1,992.4709	1,992.4709	0.3457		1,999.7301
Total	**1.6426**	**12.4351**	**12.6957**	**0.0220**		**0.5861**	**0.5861**		**0.5663**	**0.5663**	**0.0000**	**1,992.4709**	**1,992.4709**	**0.3457**		**1,999.7301**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0675	0.4603	0.9723	2.1400e-003	0.0625	8.9100e-003	0.0714	0.0178	8.1900e-003	0.0260		200.0475	200.0475	1.5600e-003		200.0803
Worker	0.0606	0.0782	0.8360	3.2300e-003	0.2794	1.9400e-003	0.2814	0.0741	1.8000e-003	0.0759		223.6311	223.6311	9.6900e-003		223.8346
Total	**0.1281**	**0.5386**	**1.8083**	**5.3700e-003**	**0.3420**	**0.0109**	**0.3528**	**0.0919**	**9.9900e-003**	**0.1019**		**423.6786**	**423.6786**	**0.0113**		**423.9148**

3.6 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5176	11.6484	12.5813	0.0220		0.5119	0.5119		0.4944	0.4944		1,992.7159	1,992.7159	0.3370		1,999.7927
Total	**1.5176**	**11.6484**	**12.5813**	**0.0220**		**0.5119**	**0.5119**		**0.4944**	**0.4944**		**1,992.7159**	**1,992.7159**	**0.3370**		**1,999.7927**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0625	0.3655	0.9355	2.1300e-003	0.0625	8.7900e-003	0.0713	0.0178	8.0900e-003	0.0259		199.0858	199.0858	1.4100e-003		199.1153
Worker	0.0578	0.0741	0.7925	3.2300e-003	0.2794	1.9600e-003	0.2814	0.0741	1.8200e-003	0.0759		220.2733	220.2733	9.3500e-003		220.4696

Total	**0.1204**	**0.4396**	**1.7280**	**5.3600e-003**	**0.3420**	**0.0108**	**0.3527**	**0.0919**	**9.9100e-003**	**0.1018**		**419.3591**	**419.3591**	**0.0108**		**419.5849**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5176	11.6484	12.5813	0.0220		0.5119	0.5119		0.4944	0.4944	0.0000	1,992.7159	1,992.7159	0.3370		1,999.7927
Total	**1.5176**	**11.6484**	**12.5813**	**0.0220**		**0.5119**	**0.5119**		**0.4944**	**0.4944**	**0.0000**	**1,992.7159**	**1,992.7159**	**0.3370**		**1,999.7927**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0625	0.3655	0.9355	2.1300e-003	0.0625	8.7900e-003	0.0713	0.0178	8.0900e-003	0.0259		199.0858	199.0858	1.4100e-003		199.1153
Worker	0.0578	0.0741	0.7925	3.2300e-003	0.2794	1.9600e-003	0.2814	0.0741	1.8200e-003	0.0759		220.2733	220.2733	9.3500e-003		220.4696
Total	**0.1204**	**0.4396**	**1.7280**	**5.3600e-003**	**0.3420**	**0.0108**	**0.3527**	**0.0919**	**9.9100e-003**	**0.1018**		**419.3591**	**419.3591**	**0.0108**		**419.5849**

3.7 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2122	1.8548	2.7493	4.5500e-003		0.0875	0.0875		0.0814	0.0814		426.3775	426.3775	0.1296		429.0987
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2122**	**1.8548**	**2.7493**	**4.5500e-003**		**0.0875**	**0.0875**		**0.0814**	**0.0814**		**426.3775**	**426.3775**	**0.1296**		**429.0987**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0116	0.0148	0.1585	6.5000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.6000e-004	0.0152		44.0547	44.0547	1.8700e-003		44.0939
Total	**0.0116**	**0.0148**	**0.1585**	**6.5000e-004**	**0.0559**	**3.9000e-004**	**0.0563**	**0.0148**	**3.6000e-004**	**0.0152**		**44.0547**	**44.0547**	**1.8700e-003**		**44.0939**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	0.2122	1.8548	2.7493	4.5500e-003		0.0875	0.0875		0.0814	0.0814	0.0000	426.3775	426.3775	0.1296		429.0987
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2122**	**1.8548**	**2.7493**	**4.5500e-003**		**0.0875**	**0.0875**		**0.0814**	**0.0814**	**0.0000**	**426.3775**	**426.3775**	**0.1296**		**429.0987**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0116	0.0148	0.1585	6.5000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.6000e-004	0.0152		44.0547	44.0547	1.8700e-003		44.0939
Total	**0.0116**	**0.0148**	**0.1585**	**6.5000e-004**	**0.0559**	**3.9000e-004**	**0.0563**	**0.0148**	**3.6000e-004**	**0.0152**		**44.0547**	**44.0547**	**1.8700e-003**		**44.0939**

3.8 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	27.2510					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8017
Total	**27.4427**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8017**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0116	0.0148	0.1585	6.5000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.6000e-004	0.0152		44.0547	44.0547	1.8700e-003		44.0939
Total	**0.0116**	**0.0148**	**0.1585**	**6.5000e-004**	**0.0559**	**3.9000e-004**	**0.0563**	**0.0148**	**3.6000e-004**	**0.0152**		**44.0547**	**44.0547**	**1.8700e-003**		**44.0939**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	27.2510					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8017
Total	**27.4427**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8017**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0116	0.0148	0.1585	6.5000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.6000e-004	0.0152		44.0547	44.0547	1.8700e-003		44.0939
Total	**0.0116**	**0.0148**	**0.1585**	**6.5000e-004**	**0.0559**	**3.9000e-004**	**0.0563**	**0.0148**	**3.6000e-004**	**0.0152**		**44.0547**	**44.0547**	**1.8700e-003**		**44.0939**

Boys & Girls Club Facilities

Orange County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Day-Care Center	24.78	1000sqft	0.57	24,784.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment -

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment -

Grading - modified

Architectural Coating - modified

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblConstructionPhase	NumDays	5.00	20.00
tblConstructionPhase	NumDays	10.00	1.00
tblConstructionPhase	PhaseEndDate	1/19/2016	2/26/2024
tblConstructionPhase	PhaseEndDate	1/4/2016	1/15/2016
tblConstructionPhase	PhaseStartDate	1/16/2016	2/23/2024
tblConstructionPhase	PhaseStartDate	1/2/2016	1/15/2016
tblGrading	AcresOfGrading	1.00	0.56
tblOffRoadEquipment	LoadFactor	0.36	0.36
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Trenchers
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentType		Paving Equipment
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2024

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2024	0.1535	0.3636	0.4589	8.0000e-004	8.0300e-003	0.0173	0.0253	2.1100e-003	0.0160	0.0181	0.0000	67.7648	67.7648	0.0185	0.0000	68.1542
Total	**0.1535**	**0.3636**	**0.4589**	**8.0000e-004**	**8.0300e-003**	**0.0173**	**0.0253**	**2.1100e-003**	**0.0160**	**0.0181**	**0.0000**	**67.7648**	**67.7648**	**0.0185**	**0.0000**	**68.1542**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2024	0.1535	0.3636	0.4588	8.0000e-004	8.0300e-003	0.0173	0.0253	2.1100e-003	0.0160	0.0181	0.0000	67.7647	67.7647	0.0185	0.0000	68.1542
Total	**0.1535**	**0.3636**	**0.4588**	**8.0000e-004**	**8.0300e-003**	**0.0173**	**0.0253**	**2.1100e-003**	**0.0160**	**0.0181**	**0.0000**	**67.7647**	**67.7647**	**0.0185**	**0.0000**	**68.1542**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2016	1/1/2016	5	1	
2	Site Preparation	Site Preparation	1/15/2016	1/15/2016	5	1	
3	Grading	Grading	2/23/2024	2/26/2024	5	2	
4	Trenching	Trenching	2/27/2024	3/11/2024	5	10	
5	Building Construction	Building Construction	3/12/2024	7/29/2024	5	100	
6	Paving	Paving	7/30/2024	8/5/2024	5	5	
7	Architectural Coating	Architectural Coating	8/6/2024	9/2/2024	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0.56

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 37,176; Non-Residential Outdoor: 12,392 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	0	8.00	174	0.41
Paving	Pavers	0	7.00	125	0.42
Paving	Rollers	0	7.00	80	0.38
Demolition	Rubber Tired Dozers	0	1.00	255	0.40
Grading	Rubber Tired Dozers	0	1.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	0	6.00	97	0.37

Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Crawler Tractors	1	8.00	208	0.43
Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Trenchers	1	8.00	80	0.50
Trenching	Plate Compactors	1	8.00	8	0.43
Paving	Paving Equipment	1	8.00	130	0.36

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	10.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.0000e-004	0.0000	3.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.4000e-004	9.2500e-003	9.1600e-003	2.0000e-005		3.9000e-004	3.9000e-004		3.7000e-004	3.7000e-004	0.0000	1.6235	1.6235	3.8000e-004	0.0000	1.6315
Total	**9.4000e-004**	**9.2500e-003**	**9.1600e-003**	**2.0000e-005**	**3.0000e-004**	**3.9000e-004**	**6.9000e-004**	**3.0000e-005**	**3.7000e-004**	**4.0000e-004**	**0.0000**	**1.6235**	**1.6235**	**3.8000e-004**	**0.0000**	**1.6315**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	3.0000e-005	3.1000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0800	0.0800	0.0000	0.0000	0.0801
Total	**2.0000e-005**	**3.0000e-005**	**3.1000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0800**	**0.0800**	**0.0000**	**0.0000**	**0.0801**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.0000e-004	0.0000	3.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.4000e-004	9.2500e-003	9.1600e-003	2.0000e-005		3.9000e-004	3.9000e-004		3.7000e-004	3.7000e-004	0.0000	1.6235	1.6235	3.8000e-004	0.0000	1.6315
Total	**9.4000e-004**	**9.2500e-003**	**9.1600e-003**	**2.0000e-005**	**3.0000e-004**	**3.9000e-004**	**6.9000e-004**	**3.0000e-005**	**3.7000e-004**	**4.0000e-004**	**0.0000**	**1.6235**	**1.6235**	**3.8000e-004**	**0.0000**	**1.6315**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	3.0000e-005	3.1000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0800	0.0800	0.0000	0.0000	0.0801
Total	**2.0000e-005**	**3.0000e-005**	**3.1000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0800**	**0.0800**	**0.0000**	**0.0000**	**0.0801**

3.5 Trenching - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.3800e-003	0.0319	0.0367	5.0000e-005		1.8300e-003	1.8300e-003		1.6900e-003	1.6900e-003	0.0000	4.4160	4.4160	1.3900e-003	0.0000	4.4453

Total	**3.3800e-003**	**0.0319**	**0.0367**	**5.0000e-005**		**1.8300e-003**	**1.8300e-003**		**1.6900e-003**	**1.6900e-003**	**0.0000**	**4.4160**	**4.4160**	**1.3900e-003**	**0.0000**	**4.4453**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	1.4000e-004	1.5400e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4001	0.4001	2.0000e-005	0.0000	0.4004
Total	**1.0000e-004**	**1.4000e-004**	**1.5400e-003**	**1.0000e-005**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4001**	**0.4001**	**2.0000e-005**	**0.0000**	**0.4004**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.3800e-003	0.0319	0.0367	5.0000e-005		1.8300e-003	1.8300e-003		1.6900e-003	1.6900e-003	0.0000	4.4160	4.4160	1.3900e-003	0.0000	4.4453
Total	**3.3800e-003**	**0.0319**	**0.0367**	**5.0000e-005**		**1.8300e-003**	**1.8300e-003**		**1.6900e-003**	**1.6900e-003**	**0.0000**	**4.4160**	**4.4160**	**1.3900e-003**	**0.0000**	**4.4453**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	1.4000e-004	1.5400e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4001	0.4001	2.0000e-005	0.0000	0.4004
Total	**1.0000e-004**	**1.4000e-004**	**1.5400e-003**	**1.0000e-005**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4001**	**0.4001**	**2.0000e-005**	**0.0000**	**0.4004**

3.6 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0296	0.2968	0.3524	5.7000e-004		0.0140	0.0140		0.0129	0.0129	0.0000	49.8469	49.8469	0.0161	0.0000	50.1854
Total	**0.0296**	**0.2968**	**0.3524**	**5.7000e-004**		**0.0140**	**0.0140**		**0.0129**	**0.0129**	**0.0000**	**49.8469**	**49.8469**	**0.0161**	**0.0000**	**50.1854**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1900e-003	7.3900e-003	0.0174	4.0000e-005	1.2300e-003	1.8000e-004	1.4100e-003	3.5000e-004	1.6000e-004	5.2000e-004	0.0000	3.6295	3.6295	3.0000e-005	0.0000	3.6300
Worker	1.0300e-003	1.4500e-003	0.0154	7.0000e-005	5.4900e-003	4.0000e-005	5.5300e-003	1.4600e-003	4.0000e-005	1.4900e-003	0.0000	4.0005	4.0005	1.6000e-004	0.0000	4.0040
Total	**2.2200e-003**	**8.8400e-003**	**0.0328**	**1.1000e-004**	**6.7200e-003**	**2.2000e-004**	**6.9400e-003**	**1.8100e-003**	**2.0000e-004**	**2.0100e-003**	**0.0000**	**7.6300**	**7.6300**	**1.9000e-004**	**0.0000**	**7.6340**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0296	0.2968	0.3524	5.7000e-004		0.0140	0.0140		0.0129	0.0129	0.0000	49.8468	49.8468	0.0161	0.0000	50.1854
Total	**0.0296**	**0.2968**	**0.3524**	**5.7000e-004**		**0.0140**	**0.0140**		**0.0129**	**0.0129**	**0.0000**	**49.8468**	**49.8468**	**0.0161**	**0.0000**	**50.1854**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1900e-003	7.3900e-003	0.0174	4.0000e-005	1.2300e-003	1.8000e-004	1.4100e-003	3.5000e-004	1.6000e-004	5.2000e-004	0.0000	3.6295	3.6295	3.0000e-005	0.0000	3.6300
Worker	1.0300e-003	1.4500e-003	0.0154	7.0000e-005	5.4900e-003	4.0000e-005	5.5300e-003	1.4600e-003	4.0000e-005	1.4900e-003	0.0000	4.0005	4.0005	1.6000e-004	0.0000	4.0040
Total	**2.2200e-003**	**8.8400e-003**	**0.0328**	**1.1000e-004**	**6.7200e-003**	**2.2000e-004**	**6.9400e-003**	**1.8100e-003**	**2.0000e-004**	**2.0100e-003**	**0.0000**	**7.6300**	**7.6300**	**1.9000e-004**	**0.0000**	**7.6340**

3.7 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.1000e-004	4.3200e-003	6.8200e-003	1.0000e-005		2.0000e-004	2.0000e-004		1.9000e-004	1.9000e-004	0.0000	0.9550	0.9550	2.9000e-004	0.0000	0.9611
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.1000e-004**	**4.3200e-003**	**6.8200e-003**	**1.0000e-005**		**2.0000e-004**	**2.0000e-004**		**1.9000e-004**	**1.9000e-004**	**0.0000**	**0.9550**	**0.9550**	**2.9000e-004**	**0.0000**	**0.9611**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	4.0000e-005	3.8000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1000	0.1000	0.0000	0.0000	0.1001
Total	**3.0000e-005**	**4.0000e-005**	**3.8000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**1.4000e-004**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**0.0000**	**0.1000**	**0.1000**	**0.0000**	**0.0000**	**0.1001**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.1000e-004	4.3200e-003	6.8200e-003	1.0000e-005		2.0000e-004	2.0000e-004		1.9000e-004	1.9000e-004	0.0000	0.9550	0.9550	2.9000e-004	0.0000	0.9611
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.1000e-004**	**4.3200e-003**	**6.8200e-003**	**1.0000e-005**		**2.0000e-004**	**2.0000e-004**		**1.9000e-004**	**1.9000e-004**	**0.0000**	**0.9550**	**0.9550**	**2.9000e-004**	**0.0000**	**0.9611**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	4.0000e-005	3.8000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1000	0.1000	0.0000	0.0000	0.1001
Total	**3.0000e-005**	**4.0000e-005**	**3.8000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**1.4000e-004**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**0.0000**	**0.1000**	**0.1000**	**0.0000**	**0.0000**	**0.1001**

3.8 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1149					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Off-Road	1.8100e-003	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5563
Total	**0.1167**	**0.0122**	**0.0181**	**3.0000e-005**		**6.1000e-004**	**6.1000e-004**		**6.1000e-004**	**6.1000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.4000e-004**	**0.0000**	**2.5563**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	6.0000e-005	6.1000e-004	0.0000	2.2000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1600	0.1600	1.0000e-005	0.0000	0.1602
Total	**4.0000e-005**	**6.0000e-005**	**6.1000e-004**	**0.0000**	**2.2000e-004**	**0.0000**	**2.2000e-004**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**0.1600**	**0.1600**	**1.0000e-005**	**0.0000**	**0.1602**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1149					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8100e-003	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5563
Total	**0.1167**	**0.0122**	**0.0181**	**3.0000e-005**		**6.1000e-004**	**6.1000e-004**		**6.1000e-004**	**6.1000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.4000e-004**	**0.0000**	**2.5563**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	6.0000e-005	6.1000e-004	0.0000	2.2000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1600	0.1600	1.0000e-005	0.0000	0.1602
Total	**4.0000e-005**	**6.0000e-005**	**6.1000e-004**	**0.0000**	**2.2000e-004**	**0.0000**	**2.2000e-004**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**0.1600**	**0.1600**	**1.0000e-005**	**0.0000**	**0.1602**

Boys & Girls Club Facilities

Orange County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Day-Care Center	24.78	1000sqft	0.57	24,784.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment -

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment -

Grading - modified

Architectural Coating - modified

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblConstructionPhase	NumDays	5.00	20.00
tblConstructionPhase	NumDays	10.00	1.00
tblConstructionPhase	PhaseEndDate	1/19/2016	2/26/2024
tblConstructionPhase	PhaseEndDate	1/4/2016	1/15/2016
tblConstructionPhase	PhaseStartDate	1/16/2016	2/23/2024
tblConstructionPhase	PhaseStartDate	1/2/2016	1/15/2016
tblGrading	AcresOfGrading	1.00	0.56
tblOffRoadEquipment	LoadFactor	0.36	0.36
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Trenchers
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentType		Paving Equipment
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2024

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2024	11.6724	9.2708	9.4882	0.0200	0.4087	0.3919	0.8006	0.0617	0.3694	0.4311	0.0000	1,881.4260	1,881.4260	0.4189	0.0000	1,890.2229
Total	**11.6724**	**9.2708**	**9.4882**	**0.0200**	**0.4087**	**0.3919**	**0.8006**	**0.0617**	**0.3694**	**0.4311**	**0.0000**	**1,881.4260**	**1,881.4260**	**0.4189**	**0.0000**	**1,890.2229**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2024	11.6724	9.2708	9.4882	0.0200	0.4087	0.3919	0.8006	0.0617	0.3694	0.4311	0.0000	1,881.4260	1,881.4260	0.4189	0.0000	1,890.2229
Total	**11.6724**	**9.2708**	**9.4882**	**0.0200**	**0.4087**	**0.3919**	**0.8006**	**0.0617**	**0.3694**	**0.4311**	**0.0000**	**1,881.4260**	**1,881.4260**	**0.4189**	**0.0000**	**1,890.2229**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2016	1/1/2016	5	1	
2	Site Preparation	Site Preparation	1/15/2016	1/15/2016	5	1	
3	Grading	Grading	2/23/2024	2/26/2024	5	2	
4	Trenching	Trenching	2/27/2024	3/11/2024	5	10	
5	Building Construction	Building Construction	3/12/2024	7/29/2024	5	100	
6	Paving	Paving	7/30/2024	8/5/2024	5	5	
7	Architectural Coating	Architectural Coating	8/6/2024	9/2/2024	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0.56

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 37,176; Non-Residential Outdoor: 12,392 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	0	8.00	174	0.41
Paving	Pavers	0	7.00	125	0.42
Paving	Rollers	0	7.00	80	0.38
Demolition	Rubber Tired Dozers	0	1.00	255	0.40
Grading	Rubber Tired Dozers	0	1.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	0	6.00	97	0.37

Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Crawler Tractors	1	8.00	208	0.43
Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Trenchers	1	8.00	80	0.50
Trenching	Plate Compactors	1	8.00	8	0.43
Paving	Paving Equipment	1	8.00	130	0.36

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	10.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.4 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2969	0.0000	0.2969	0.0321	0.0000	0.0321			0.0000			0.0000
Off-Road	0.9448	9.2452	9.1644	0.0186		0.3911	0.3911		0.3686	0.3686		1,789.6515	1,789.6515	0.4153		1,798.3725
Total	**0.9448**	**9.2452**	**9.1644**	**0.0186**	**0.2969**	**0.3911**	**0.6880**	**0.0321**	**0.3686**	**0.4007**		**1,789.6515**	**1,789.6515**	**0.4153**		**1,798.3725**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0210	0.0256	0.3238	1.3600e-003	0.1118	7.9000e-004	0.1126	0.0296	7.3000e-004	0.0304		91.7745	91.7745	3.6100e-003		91.8504
Total	**0.0210**	**0.0256**	**0.3238**	**1.3600e-003**	**0.1118**	**7.9000e-004**	**0.1126**	**0.0296**	**7.3000e-004**	**0.0304**		**91.7745**	**91.7745**	**3.6100e-003**		**91.8504**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2969	0.0000	0.2969	0.0321	0.0000	0.0321			0.0000			0.0000
Off-Road	0.9448	9.2452	9.1644	0.0186		0.3911	0.3911		0.3686	0.3686	0.0000	1,789.6515	1,789.6515	0.4153		1,798.3725
Total	**0.9448**	**9.2452**	**9.1644**	**0.0186**	**0.2969**	**0.3911**	**0.6880**	**0.0321**	**0.3686**	**0.4007**	**0.0000**	**1,789.6515**	**1,789.6515**	**0.4153**		**1,798.3725**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0210	0.0256	0.3238	1.3600e-003	0.1118	7.9000e-004	0.1126	0.0296	7.3000e-004	0.0304		91.7745	91.7745	3.6100e-003		91.8504
Total	**0.0210**	**0.0256**	**0.3238**	**1.3600e-003**	**0.1118**	**7.9000e-004**	**0.1126**	**0.0296**	**7.3000e-004**	**0.0304**		**91.7745**	**91.7745**	**3.6100e-003**		**91.8504**

3.5 Trenching - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6767	6.3882	7.3403	0.0102		0.3669	0.3669		0.3383	0.3383		973.5616	973.5616	0.3073		980.0149

Total	**0.6767**	**6.3882**	**7.3403**	**0.0102**		**0.3669**	**0.3669**		**0.3383**	**0.3383**		**973.5616**	**973.5616**	**0.3073**		**980.0149**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0210	0.0256	0.3238	1.3600e-003	0.1118	7.9000e-004	0.1126	0.0296	7.3000e-004	0.0304		91.7745	91.7745	3.6100e-003		91.8504
Total	**0.0210**	**0.0256**	**0.3238**	**1.3600e-003**	**0.1118**	**7.9000e-004**	**0.1126**	**0.0296**	**7.3000e-004**	**0.0304**		**91.7745**	**91.7745**	**3.6100e-003**		**91.8504**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6767	6.3882	7.3403	0.0102		0.3669	0.3669		0.3383	0.3383	0.0000	973.5616	973.5616	0.3073		980.0149
Total	**0.6767**	**6.3882**	**7.3403**	**0.0102**		**0.3669**	**0.3669**		**0.3383**	**0.3383**	**0.0000**	**973.5616**	**973.5616**	**0.3073**		**980.0149**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0210	0.0256	0.3238	1.3600e-003	0.1118	7.9000e-004	0.1126	0.0296	7.3000e-004	0.0304		91.7745	91.7745	3.6100e-003		91.8504
Total	**0.0210**	**0.0256**	**0.3238**	**1.3600e-003**	**0.1118**	**7.9000e-004**	**0.1126**	**0.0296**	**7.3000e-004**	**0.0304**		**91.7745**	**91.7745**	**3.6100e-003**		**91.8504**

3.6 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5914	5.9360	7.0483	0.0114		0.2808	0.2808		0.2583	0.2583		1,098.9357	1,098.9357	0.3554		1,106.3995
Total	**0.5914**	**5.9360**	**7.0483**	**0.0114**		**0.2808**	**0.2808**		**0.2583**	**0.2583**		**1,098.9357**	**1,098.9357**	**0.3554**		**1,106.3995**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0226	0.1425	0.2938	8.6000e-004	0.0250	3.5700e-003	0.0286	7.1300e-003	3.2800e-003	0.0104		80.3039	80.3039	5.4000e-004		80.3153
Worker	0.0210	0.0256	0.3238	1.3600e-003	0.1118	7.9000e-004	0.1126	0.0296	7.3000e-004	0.0304		91.7745	91.7745	3.6100e-003		91.8504
Total	**0.0436**	**0.1681**	**0.6176**	**2.2200e-003**	**0.1368**	**4.3600e-003**	**0.1412**	**0.0368**	**4.0100e-003**	**0.0408**		**172.0784**	**172.0784**	**4.1500e-003**		**172.1656**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5914	5.9360	7.0483	0.0114		0.2808	0.2808		0.2583	0.2583	0.0000	1,098.9357	1,098.9357	0.3554		1,106.3995
Total	**0.5914**	**5.9360**	**7.0483**	**0.0114**		**0.2808**	**0.2808**		**0.2583**	**0.2583**	**0.0000**	**1,098.9357**	**1,098.9357**	**0.3554**		**1,106.3995**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0226	0.1425	0.2938	8.6000e-004	0.0250	3.5700e-003	0.0286	7.1300e-003	3.2800e-003	0.0104		80.3039	80.3039	5.4000e-004		80.3153
Worker	0.0210	0.0256	0.3238	1.3600e-003	0.1118	7.9000e-004	0.1126	0.0296	7.3000e-004	0.0304		91.7745	91.7745	3.6100e-003		91.8504
Total	**0.0436**	**0.1681**	**0.6176**	**2.2200e-003**	**0.1368**	**4.3600e-003**	**0.1412**	**0.0368**	**4.0100e-003**	**0.0408**		**172.0784**	**172.0784**	**4.1500e-003**		**172.1656**

3.7 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2041	1.7295	2.7277	4.4900e-003		0.0809	0.0809		0.0753	0.0753		421.0884	421.0884	0.1279		423.7737
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2041**	**1.7295**	**2.7277**	**4.4900e-003**		**0.0809**	**0.0809**		**0.0753**	**0.0753**		**421.0884**	**421.0884**	**0.1279**		**423.7737**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0105	0.0128	0.1619	6.8000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.7000e-004	0.0152		45.8873	45.8873	1.8100e-003		45.9252
Total	**0.0105**	**0.0128**	**0.1619**	**6.8000e-004**	**0.0559**	**3.9000e-004**	**0.0563**	**0.0148**	**3.7000e-004**	**0.0152**		**45.8873**	**45.8873**	**1.8100e-003**		**45.9252**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2041	1.7295	2.7277	4.4900e-003		0.0809	0.0809		0.0753	0.0753	0.0000	421.0884	421.0884	0.1279		423.7737
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2041**	**1.7295**	**2.7277**	**4.4900e-003**		**0.0809**	**0.0809**		**0.0753**	**0.0753**	**0.0000**	**421.0884**	**421.0884**	**0.1279**		**423.7737**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0105	0.0128	0.1619	6.8000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.7000e-004	0.0152		45.8873	45.8873	1.8100e-003		45.9252
Total	**0.0105**	**0.0128**	**0.1619**	**6.8000e-004**	**0.0559**	**3.9000e-004**	**0.0563**	**0.0148**	**3.7000e-004**	**0.0152**		**45.8873**	**45.8873**	**1.8100e-003**		**45.9252**

3.8 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	11.4874					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.7809
Total	**11.6681**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.7809**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	4.2100e-003	5.1300e-003	0.0648	2.7000e-004	0.0224	1.6000e-004	0.0225	5.9300e-003	1.5000e-004	6.0800e-003		18.3549	18.3549	7.2000e-004		18.3701
Total	**4.2100e-003**	**5.1300e-003**	**0.0648**	**2.7000e-004**	**0.0224**	**1.6000e-004**	**0.0225**	**5.9300e-003**	**1.5000e-004**	**6.0800e-003**		**18.3549**	**18.3549**	**7.2000e-004**		**18.3701**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	11.4874					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.7809
Total	**11.6681**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.7809**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	4.2100e-003	5.1300e-003	0.0648	2.7000e-004	0.0224	1.6000e-004	0.0225	5.9300e-003	1.5000e-004	6.0800e-003		18.3549	18.3549	7.2000e-004		18.3701
Total	**4.2100e-003**	**5.1300e-003**	**0.0648**	**2.7000e-004**	**0.0224**	**1.6000e-004**	**0.0225**	**5.9300e-003**	**1.5000e-004**	**6.0800e-003**		**18.3549**	**18.3549**	**7.2000e-004**		**18.3701**

Boys & Girls Club Facilities

Orange County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Day-Care Center	24.78	1000sqft	0.57	24,784.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment -

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment -

Grading - modified

Architectural Coating - modified

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblConstructionPhase	NumDays	5.00	20.00
tblConstructionPhase	NumDays	10.00	1.00
tblConstructionPhase	PhaseEndDate	1/19/2016	2/26/2024
tblConstructionPhase	PhaseEndDate	1/4/2016	1/15/2016
tblConstructionPhase	PhaseStartDate	1/16/2016	2/23/2024
tblConstructionPhase	PhaseStartDate	1/2/2016	1/15/2016
tblGrading	AcresOfGrading	1.00	0.56
tblOffRoadEquipment	LoadFactor	0.36	0.36
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Trenchers
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentType		Paving Equipment
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2024

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2024	11.6726	9.2733	9.4646	0.0199	0.4087	0.3919	0.8006	0.0617	0.3694	0.4311	0.0000	1,876.5273	1,876.5273	0.4189	0.0000	1,885.3241
Total	**11.6726**	**9.2733**	**9.4646**	**0.0199**	**0.4087**	**0.3919**	**0.8006**	**0.0617**	**0.3694**	**0.4311**	**0.0000**	**1,876.5273**	**1,876.5273**	**0.4189**	**0.0000**	**1,885.3241**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2024	11.6726	9.2733	9.4646	0.0199	0.4087	0.3919	0.8006	0.0617	0.3694	0.4311	0.0000	1,876.5273	1,876.5273	0.4189	0.0000	1,885.3241
Total	**11.6726**	**9.2733**	**9.4646**	**0.0199**	**0.4087**	**0.3919**	**0.8006**	**0.0617**	**0.3694**	**0.4311**	**0.0000**	**1,876.5273**	**1,876.5273**	**0.4189**	**0.0000**	**1,885.3241**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2016	1/1/2016	5	1	
2	Site Preparation	Site Preparation	1/15/2016	1/15/2016	5	1	
3	Grading	Grading	2/23/2024	2/26/2024	5	2	
4	Trenching	Trenching	2/27/2024	3/11/2024	5	10	
5	Building Construction	Building Construction	3/12/2024	7/29/2024	5	100	
6	Paving	Paving	7/30/2024	8/5/2024	5	5	
7	Architectural Coating	Architectural Coating	8/6/2024	9/2/2024	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0.56

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 37,176; Non-Residential Outdoor: 12,392 (Architectural Coating –

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	0	8.00	174	0.41
Paving	Pavers	0	7.00	125	0.42
Paving	Rollers	0	7.00	80	0.38
Demolition	Rubber Tired Dozers	0	1.00	255	0.40
Grading	Rubber Tired Dozers	0	1.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	0	6.00	97	0.37

Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Crawler Tractors	1	8.00	208	0.43
Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Trenchers	1	8.00	80	0.50
Trenching	Plate Compactors	1	8.00	8	0.43
Paving	Paving Equipment	1	8.00	130	0.36

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	10.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.4 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2969	0.0000	0.2969	0.0321	0.0000	0.0321			0.0000			0.0000
Off-Road	0.9448	9.2452	9.1644	0.0186		0.3911	0.3911		0.3686	0.3686		1,789.6515	1,789.6515	0.4153		1,798.3725
Total	**0.9448**	**9.2452**	**9.1644**	**0.0186**	**0.2969**	**0.3911**	**0.6880**	**0.0321**	**0.3686**	**0.4007**		**1,789.6515**	**1,789.6515**	**0.4153**		**1,798.3725**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0221	0.0281	0.3001	1.2900e-003	0.1118	7.9000e-004	0.1126	0.0296	7.3000e-004	0.0304		86.8758	86.8758	3.6100e-003		86.9516
Total	**0.0221**	**0.0281**	**0.3001**	**1.2900e-003**	**0.1118**	**7.9000e-004**	**0.1126**	**0.0296**	**7.3000e-004**	**0.0304**		**86.8758**	**86.8758**	**3.6100e-003**		**86.9516**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2969	0.0000	0.2969	0.0321	0.0000	0.0321			0.0000			0.0000
Off-Road	0.9448	9.2452	9.1644	0.0186		0.3911	0.3911		0.3686	0.3686	0.0000	1,789.6515	1,789.6515	0.4153		1,798.3725
Total	**0.9448**	**9.2452**	**9.1644**	**0.0186**	**0.2969**	**0.3911**	**0.6880**	**0.0321**	**0.3686**	**0.4007**	**0.0000**	**1,789.6515**	**1,789.6515**	**0.4153**		**1,798.3725**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0221	0.0281	0.3001	1.2900e-003	0.1118	7.9000e-004	0.1126	0.0296	7.3000e-004	0.0304		86.8758	86.8758	3.6100e-003		86.9516
Total	**0.0221**	**0.0281**	**0.3001**	**1.2900e-003**	**0.1118**	**7.9000e-004**	**0.1126**	**0.0296**	**7.3000e-004**	**0.0304**		**86.8758**	**86.8758**	**3.6100e-003**		**86.9516**

3.5 Trenching - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6767	6.3882	7.3403	0.0102		0.3669	0.3669		0.3383	0.3383		973.5616	973.5616	0.3073		980.0149

Total	**0.6767**	**6.3882**	**7.3403**	**0.0102**		**0.3669**	**0.3669**		**0.3383**	**0.3383**		**973.5616**	**973.5616**	**0.3073**		**980.0149**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0221	0.0281	0.3001	1.2900e-003	0.1118	7.9000e-004	0.1126	0.0296	7.3000e-004	0.0304		86.8758	86.8758	3.6100e-003		86.9516
Total	**0.0221**	**0.0281**	**0.3001**	**1.2900e-003**	**0.1118**	**7.9000e-004**	**0.1126**	**0.0296**	**7.3000e-004**	**0.0304**		**86.8758**	**86.8758**	**3.6100e-003**		**86.9516**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6767	6.3882	7.3403	0.0102		0.3669	0.3669		0.3383	0.3383	0.0000	973.5616	973.5616	0.3073		980.0149
Total	**0.6767**	**6.3882**	**7.3403**	**0.0102**		**0.3669**	**0.3669**		**0.3383**	**0.3383**	**0.0000**	**973.5616**	**973.5616**	**0.3073**		**980.0149**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0221	0.0281	0.3001	1.2900e-003	0.1118	7.9000e-004	0.1126	0.0296	7.3000e-004	0.0304		86.8758	86.8758	3.6100e-003		86.9516
Total	**0.0221**	**0.0281**	**0.3001**	**1.2900e-003**	**0.1118**	**7.9000e-004**	**0.1126**	**0.0296**	**7.3000e-004**	**0.0304**		**86.8758**	**86.8758**	**3.6100e-003**		**86.9516**

3.6 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5914	5.9360	7.0483	0.0114		0.2808	0.2808		0.2583	0.2583		1,098.9357	1,098.9357	0.3554		1,106.3995
Total	**0.5914**	**5.9360**	**7.0483**	**0.0114**		**0.2808**	**0.2808**		**0.2583**	**0.2583**		**1,098.9357**	**1,098.9357**	**0.3554**		**1,106.3995**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0245	0.1449	0.3681	8.5000e-004	0.0250	3.5900e-003	0.0286	7.1300e-003	3.3100e-003	0.0104		79.6178	79.6178	5.7000e-004		79.6297
Worker	0.0221	0.0281	0.3001	1.2900e-003	0.1118	7.9000e-004	0.1126	0.0296	7.3000e-004	0.0304		86.8758	86.8758	3.6100e-003		86.9516
Total	**0.0466**	**0.1731**	**0.6682**	**2.1400e-003**	**0.1368**	**4.3800e-003**	**0.1412**	**0.0368**	**4.0400e-003**	**0.0408**		**166.4936**	**166.4936**	**4.1800e-003**		**166.5813**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5914	5.9360	7.0483	0.0114		0.2808	0.2808		0.2583	0.2583	0.0000	1,098.9357	1,098.9357	0.3554		1,106.3995
Total	**0.5914**	**5.9360**	**7.0483**	**0.0114**		**0.2808**	**0.2808**		**0.2583**	**0.2583**	**0.0000**	**1,098.9357**	**1,098.9357**	**0.3554**		**1,106.3995**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0245	0.1449	0.3681	8.5000e-004	0.0250	3.5900e-003	0.0286	7.1300e-003	3.3100e-003	0.0104		79.6178	79.6178	5.7000e-004		79.6297
Worker	0.0221	0.0281	0.3001	1.2900e-003	0.1118	7.9000e-004	0.1126	0.0296	7.3000e-004	0.0304		86.8758	86.8758	3.6100e-003		86.9516
Total	**0.0466**	**0.1731**	**0.6682**	**2.1400e-003**	**0.1368**	**4.3800e-003**	**0.1412**	**0.0368**	**4.0400e-003**	**0.0408**		**166.4936**	**166.4936**	**4.1800e-003**		**166.5813**

3.7 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2041	1.7295	2.7277	4.4900e-003		0.0809	0.0809		0.0753	0.0753		421.0884	421.0884	0.1279		423.7737
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2041**	**1.7295**	**2.7277**	**4.4900e-003**		**0.0809**	**0.0809**		**0.0753**	**0.0753**		**421.0884**	**421.0884**	**0.1279**		**423.7737**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0110	0.0141	0.1501	6.5000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.7000e-004	0.0152		43.4379	43.4379	1.8100e-003		43.4758
Total	**0.0110**	**0.0141**	**0.1501**	**6.5000e-004**	**0.0559**	**3.9000e-004**	**0.0563**	**0.0148**	**3.7000e-004**	**0.0152**		**43.4379**	**43.4379**	**1.8100e-003**		**43.4758**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2041	1.7295	2.7277	4.4900e-003		0.0809	0.0809		0.0753	0.0753	0.0000	421.0884	421.0884	0.1279		423.7737
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2041**	**1.7295**	**2.7277**	**4.4900e-003**		**0.0809**	**0.0809**		**0.0753**	**0.0753**	**0.0000**	**421.0884**	**421.0884**	**0.1279**		**423.7737**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0110	0.0141	0.1501	6.5000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.7000e-004	0.0152		43.4379	43.4379	1.8100e-003		43.4758
Total	**0.0110**	**0.0141**	**0.1501**	**6.5000e-004**	**0.0559**	**3.9000e-004**	**0.0563**	**0.0148**	**3.7000e-004**	**0.0152**		**43.4379**	**43.4379**	**1.8100e-003**		**43.4758**

3.8 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	11.4874					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.7809
Total	**11.6681**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.7809**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	4.4100e-003	5.6300e-003	0.0600	2.6000e-004	0.0224	1.6000e-004	0.0225	5.9300e-003	1.5000e-004	6.0800e-003		17.3752	17.3752	7.2000e-004		17.3903
Total	**4.4100e-003**	**5.6300e-003**	**0.0600**	**2.6000e-004**	**0.0224**	**1.6000e-004**	**0.0225**	**5.9300e-003**	**1.5000e-004**	**6.0800e-003**		**17.3752**	**17.3752**	**7.2000e-004**		**17.3903**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	11.4874					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.7809
Total	**11.6681**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.7809**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	4.4100e-003	5.6300e-003	0.0600	2.6000e-004	0.0224	1.6000e-004	0.0225	5.9300e-003	1.5000e-004	6.0800e-003		17.3752	17.3752	7.2000e-004		17.3903
Total	**4.4100e-003**	**5.6300e-003**	**0.0600**	**2.6000e-004**	**0.0224**	**1.6000e-004**	**0.0225**	**5.9300e-003**	**1.5000e-004**	**6.0800e-003**		**17.3752**	**17.3752**	**7.2000e-004**		**17.3903**

Physical Education Outdoor Labs

Orange County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	574.63	1000sqft	13.19	574,625.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - modified

Off-road Equipment -

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Grading - modified

Architectural Coating - modified

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	287,313.00	105,000.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	861,938.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblConstructionPhase	NumDays	300.00	100.00
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	NumDays	30.00	8.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	10.00	1.00
tblConstructionPhase	PhaseEndDate	2/10/2015	8/10/2023
tblConstructionPhase	PhaseEndDate	1/2/2015	1/29/2015
tblConstructionPhase	PhaseStartDate	1/30/2015	8/1/2023
tblConstructionPhase	PhaseStartDate	1/2/2015	1/29/2015
tblGrading	AcresOfGrading	8.00	13.00
tblLandUse	LandUseSquareFeet	574,630.00	574,625.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00

tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblProjectCharacteristics	OperationalYear	2014	2024

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2023	0.0987	0.6531	1.2508	3.2000e-003	0.1545	0.0272	0.1817	0.0405	0.0254	0.0659	0.0000	239.8811	239.8811	0.0232	0.0000	240.3687
2024	0.6208	0.0767	0.1614	4.2000e-004	0.0201	3.1400e-003	0.0232	5.3800e-003	2.9700e-003	8.3500e-003	0.0000	31.0627	31.0627	2.8500e-003	0.0000	31.1225
Total	**0.7195**	**0.7298**	**1.4122**	**3.6200e-003**	**0.1746**	**0.0304**	**0.2049**	**0.0459**	**0.0284**	**0.0742**	**0.0000**	**270.9438**	**270.9438**	**0.0261**	**0.0000**	**271.4912**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					

2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2023	0.0987	0.6531	1.2508	3.2000e-003	0.1545	0.0272	0.1817	0.0405	0.0254	0.0659	0.0000	239.8811	239.8811	0.0232	0.0000	240.3686
2024	0.6208	0.0767	0.1614	4.2000e-004	0.0201	3.1400e-003	0.0232	5.3800e-003	2.9700e-003	8.3500e-003	0.0000	31.0627	31.0627	2.8500e-003	0.0000	31.1225
Total	**0.7195**	**0.7298**	**1.4122**	**3.6200e-003**	**0.1746**	**0.0304**	**0.2049**	**0.0459**	**0.0284**	**0.0742**	**0.0000**	**270.9437**	**270.9437**	**0.0261**	**0.0000**	**271.4911**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2015	1/1/2015	5	1	
2	Site Preparation	Site Preparation	1/29/2015	1/29/2015	5	1	
3	Grading	Grading	8/1/2023	8/10/2023	5	8	
4	Trenching	Trenching	8/11/2023	8/24/2023	5	10	
5	Building Construction	Building Construction	8/25/2023	1/11/2024	5	100	
6	Paving	Paving	1/12/2024	1/25/2024	5	10	
7	Architectural Coating	Architectural Coating	1/26/2024	2/22/2024	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 13

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 105,000 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	162	0.38
Demolition	Rubber Tired Dozers	0	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	0	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Crawler Tractors	1	8.00	208	0.43
Grading	Excavators	0	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	0	8.00	255	0.40
Grading	Scrapers	0	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Trenching	Plate Compactors	1	8.00	8	0.43
Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Trenchers	1	8.00	80	0.50
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Generator Sets	1	4.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Welders	1	4.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	0	8.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	0	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	241.00	94.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	48.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.8900e-003	0.0000	6.8900e-003	7.4000e-004	0.0000	7.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.1600e-003	0.0426	0.0329	6.0000e-005		1.9900e-003	1.9900e-003		1.8300e-003	1.8300e-003	0.0000	5.7050	5.7050	1.8500e-003	0.0000	5.7437
Total	**4.1600e-003**	**0.0426**	**0.0329**	**6.0000e-005**	**6.8900e-003**	**1.9900e-003**	**8.8800e-003**	**7.4000e-004**	**1.8300e-003**	**2.5700e-003**	**0.0000**	**5.7050**	**5.7050**	**1.8500e-003**	**0.0000**	**5.7437**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-005	1.0000e-004	1.0400e-003	0.0000	3.5000e-004	0.0000	3.5000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.2597	0.2597	1.0000e-005	0.0000	0.2599
Total	**7.0000e-005**	**1.0000e-004**	**1.0400e-003**	**0.0000**	**3.5000e-004**	**0.0000**	**3.5000e-004**	**9.0000e-005**	**0.0000**	**1.0000e-004**	**0.0000**	**0.2597**	**0.2597**	**1.0000e-005**	**0.0000**	**0.2599**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.8900e-003	0.0000	6.8900e-003	7.4000e-004	0.0000	7.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.1600e-003	0.0426	0.0329	6.0000e-005		1.9900e-003	1.9900e-003		1.8300e-003	1.8300e-003	0.0000	5.7050	5.7050	1.8500e-003	0.0000	5.7437
Total	**4.1600e-003**	**0.0426**	**0.0329**	**6.0000e-005**	**6.8900e-003**	**1.9900e-003**	**8.8800e-003**	**7.4000e-004**	**1.8300e-003**	**2.5700e-003**	**0.0000**	**5.7050**	**5.7050**	**1.8500e-003**	**0.0000**	**5.7437**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-005	1.0000e-004	1.0400e-003	0.0000	3.5000e-004	0.0000	3.5000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.2597	0.2597	1.0000e-005	0.0000	0.2599
Total	**7.0000e-005**	**1.0000e-004**	**1.0400e-003**	**0.0000**	**3.5000e-004**	**0.0000**	**3.5000e-004**	**9.0000e-005**	**0.0000**	**1.0000e-004**	**0.0000**	**0.2597**	**0.2597**	**1.0000e-005**	**0.0000**	**0.2599**

3.5 Trenching - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.4900e-003	0.0332	0.0367	5.0000e-005		1.9600e-003	1.9600e-003		1.8000e-003	1.8000e-003	0.0000	4.4145	4.4145	1.3900e-003	0.0000	4.4437
Total	**3.4900e-003**	**0.0332**	**0.0367**	**5.0000e-005**		**1.9600e-003**	**1.9600e-003**		**1.8000e-003**	**1.8000e-003**	**0.0000**	**4.4145**	**4.4145**	**1.3900e-003**	**0.0000**	**4.4437**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	1.5000e-004	1.6200e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4057	0.4057	2.0000e-005	0.0000	0.4061

Total	**1.1000e-004**	**1.5000e-004**	**1.6200e-003**	**1.0000e-005**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4057**	**0.4057**	**2.0000e-005**	**0.0000**	**0.4061**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.4900e-003	0.0332	0.0367	5.0000e-005		1.9600e-003	1.9600e-003		1.8000e-003	1.8000e-003	0.0000	4.4145	4.4145	1.3900e-003	0.0000	4.4437
Total	**3.4900e-003**	**0.0332**	**0.0367**	**5.0000e-005**		**1.9600e-003**	**1.9600e-003**		**1.8000e-003**	**1.8000e-003**	**0.0000**	**4.4145**	**4.4145**	**1.3900e-003**	**0.0000**	**4.4437**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	1.5000e-004	1.6200e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4057	0.4057	2.0000e-005	0.0000	0.4061
Total	**1.1000e-004**	**1.5000e-004**	**1.6200e-003**	**1.0000e-005**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4057**	**0.4057**	**2.0000e-005**	**0.0000**	**0.4061**

3.6 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0413	0.3843	0.4437	7.2000e-004		0.0187	0.0187		0.0175	0.0175	0.0000	62.4857	62.4857	0.0157	0.0000	62.8154
Total	**0.0413**	**0.3843**	**0.4437**	**7.2000e-004**		**0.0187**	**0.0187**		**0.0175**	**0.0175**	**0.0000**	**62.4857**	**62.4857**	**0.0157**	**0.0000**	**62.8154**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0259	0.1594	0.3790	9.1000e-004	0.0263	3.7400e-003	0.0301	7.5200e-003	3.4400e-003	0.0110	0.0000	77.6318	77.6318	5.3000e-004	0.0000	77.6430
Worker	0.0237	0.0334	0.3560	1.4400e-003	0.1204	8.6000e-004	0.1212	0.0320	8.0000e-004	0.0328	0.0000	88.9789	88.9789	3.7200e-003	0.0000	89.0569
Total	**0.0495**	**0.1928**	**0.7350**	**2.3500e-003**	**0.1467**	**4.6000e-003**	**0.1513**	**0.0395**	**4.2400e-003**	**0.0437**	**0.0000**	**166.6107**	**166.6107**	**4.2500e-003**	**0.0000**	**166.6999**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Off-Road	0.0413	0.3843	0.4437	7.2000e-004		0.0187	0.0187		0.0175	0.0175	0.0000	62.4856	62.4856	0.0157	0.0000	62.8153
Total	**0.0413**	**0.3843**	**0.4437**	**7.2000e-004**		**0.0187**	**0.0187**		**0.0175**	**0.0175**	**0.0000**	**62.4856**	**62.4856**	**0.0157**	**0.0000**	**62.8153**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0259	0.1594	0.3790	9.1000e-004	0.0263	3.7400e-003	0.0301	7.5200e-003	3.4400e-003	0.0110	0.0000	77.6318	77.6318	5.3000e-004	0.0000	77.6430
Worker	0.0237	0.0334	0.3560	1.4400e-003	0.1204	8.6000e-004	0.1212	0.0320	8.0000e-004	0.0328	0.0000	88.9789	88.9789	3.7200e-003	0.0000	89.0569
Total	**0.0495**	**0.1928**	**0.7350**	**2.3500e-003**	**0.1467**	**4.6000e-003**	**0.1513**	**0.0395**	**4.2400e-003**	**0.0437**	**0.0000**	**166.6107**	**166.6107**	**4.2500e-003**	**0.0000**	**166.6999**

3.6 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.8300e-003	0.0355	0.0437	7.0000e-005		1.6200e-003	1.6200e-003		1.5200e-003	1.5200e-003	0.0000	6.1814	6.1814	1.5500e-003	0.0000	6.2139
Total	**3.8300e-003**	**0.0355**	**0.0437**	**7.0000e-005**		**1.6200e-003**	**1.6200e-003**		**1.5200e-003**	**1.5200e-003**	**0.0000**	**6.1814**	**6.1814**	**1.5500e-003**	**0.0000**	**6.2139**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.5100e-003	0.0156	0.0369	9.0000e-005	2.6100e-003	3.8000e-004	2.9800e-003	7.4000e-004	3.5000e-004	1.0900e-003	0.0000	7.6763	7.6763	5.0000e-005	0.0000	7.6774
Worker	2.2300e-003	3.1400e-003	0.0334	1.4000e-004	0.0119	9.0000e-005	0.0120	3.1600e-003	8.0000e-005	3.2400e-003	0.0000	8.6771	8.6771	3.6000e-004	0.0000	8.6846
Total	**4.7400e-003**	**0.0188**	**0.0702**	**2.3000e-004**	**0.0145**	**4.7000e-004**	**0.0150**	**3.9000e-003**	**4.3000e-004**	**4.3300e-003**	**0.0000**	**16.3534**	**16.3534**	**4.1000e-004**	**0.0000**	**16.3620**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.8300e-003	0.0355	0.0437	7.0000e-005		1.6200e-003	1.6200e-003		1.5200e-003	1.5200e-003	0.0000	6.1814	6.1814	1.5500e-003	0.0000	6.2139
Total	**3.8300e-003**	**0.0355**	**0.0437**	**7.0000e-005**		**1.6200e-003**	**1.6200e-003**		**1.5200e-003**	**1.5200e-003**	**0.0000**	**6.1814**	**6.1814**	**1.5500e-003**	**0.0000**	**6.2139**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.5100e-003	0.0156	0.0369	9.0000e-005	2.6100e-003	3.8000e-004	2.9800e-003	7.4000e-004	3.5000e-004	1.0900e-003	0.0000	7.6763	7.6763	5.0000e-005	0.0000	7.6774
Worker	2.2300e-003	3.1400e-003	0.0334	1.4000e-004	0.0119	9.0000e-005	0.0120	3.1600e-003	8.0000e-005	3.2400e-003	0.0000	8.6771	8.6771	3.6000e-004	0.0000	8.6846
Total	**4.7400e-003**	**0.0188**	**0.0702**	**2.3000e-004**	**0.0145**	**4.7000e-004**	**0.0150**	**3.9000e-003**	**4.3000e-004**	**4.3300e-003**	**0.0000**	**16.3534**	**16.3534**	**4.1000e-004**	**0.0000**	**16.3620**

3.7 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.0300e-003	8.7500e-003	0.0138	2.0000e-005		4.1000e-004	4.1000e-004		3.8000e-004	3.8000e-004	0.0000	1.9340	1.9340	5.9000e-004	0.0000	1.9464
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.0300e-003**	**8.7500e-003**	**0.0138**	**2.0000e-005**		**4.1000e-004**	**4.1000e-004**		**3.8000e-004**	**3.8000e-004**	**0.0000**	**1.9340**	**1.9340**	**5.9000e-004**	**0.0000**	**1.9464**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	7.0000e-005	7.7000e-004	0.0000	2.7000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2000	0.2000	1.0000e-005	0.0000	0.2002

Total	**5.0000e-005**	**7.0000e-005**	**7.7000e-004**	**0.0000**	**2.7000e-004**	**0.0000**	**2.8000e-004**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**0.0000**	**0.2000**	**0.2000**	**1.0000e-005**	**0.0000**	**0.2002**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.0300e-003	8.7500e-003	0.0138	2.0000e-005		4.1000e-004	4.1000e-004		3.8000e-004	3.8000e-004	0.0000	1.9340	1.9340	5.9000e-004	0.0000	1.9464
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.0300e-003**	**8.7500e-003**	**0.0138**	**2.0000e-005**		**4.1000e-004**	**4.1000e-004**		**3.8000e-004**	**3.8000e-004**	**0.0000**	**1.9340**	**1.9340**	**5.9000e-004**	**0.0000**	**1.9464**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	7.0000e-005	7.7000e-004	0.0000	2.7000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2000	0.2000	1.0000e-005	0.0000	0.2002
Total	**5.0000e-005**	**7.0000e-005**	**7.7000e-004**	**0.0000**	**2.7000e-004**	**0.0000**	**2.8000e-004**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**0.0000**	**0.2000**	**0.2000**	**1.0000e-005**	**0.0000**	**0.2002**

3.8 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6083					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8100e-003	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5563
Total	**0.6102**	**0.0122**	**0.0181**	**3.0000e-005**		**6.1000e-004**	**6.1000e-004**		**6.1000e-004**	**6.1000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.4000e-004**	**0.0000**	**2.5563**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.9000e-004	1.3900e-003	0.0148	6.0000e-005	5.2700e-003	4.0000e-005	5.3100e-003	1.4000e-003	4.0000e-005	1.4300e-003	0.0000	3.8405	3.8405	1.6000e-004	0.0000	3.8438
Total	**9.9000e-004**	**1.3900e-003**	**0.0148**	**6.0000e-005**	**5.2700e-003**	**4.0000e-005**	**5.3100e-003**	**1.4000e-003**	**4.0000e-005**	**1.4300e-003**	**0.0000**	**3.8405**	**3.8405**	**1.6000e-004**	**0.0000**	**3.8438**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Archit. Coating	0.6083					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8100e-003	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5563
Total	**0.6102**	**0.0122**	**0.0181**	**3.0000e-005**		**6.1000e-004**	**6.1000e-004**		**6.1000e-004**	**6.1000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.4000e-004**	**0.0000**	**2.5563**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.9000e-004	1.3900e-003	0.0148	6.0000e-005	5.2700e-003	4.0000e-005	5.3100e-003	1.4000e-003	4.0000e-005	1.4300e-003	0.0000	3.8405	3.8405	1.6000e-004	0.0000	3.8438
Total	**9.9000e-004**	**1.3900e-003**	**0.0148**	**6.0000e-005**	**5.2700e-003**	**4.0000e-005**	**5.3100e-003**	**1.4000e-003**	**4.0000e-005**	**1.4300e-003**	**0.0000**	**3.8405**	**3.8405**	**1.6000e-004**	**0.0000**	**3.8438**

Physical Education Outdoor Labs

Orange County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	574.63	1000sqft	13.19	574,625.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - modified

Off-road Equipment -

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Grading - modified

Architectural Coating - modified

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	287,313.00	105,000.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	861,938.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblConstructionPhase	NumDays	300.00	100.00
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	NumDays	30.00	8.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	10.00	1.00
tblConstructionPhase	PhaseEndDate	2/10/2015	8/10/2023
tblConstructionPhase	PhaseEndDate	1/2/2015	1/29/2015
tblConstructionPhase	PhaseStartDate	1/30/2015	8/1/2023
tblConstructionPhase	PhaseStartDate	1/2/2015	1/29/2015
tblGrading	AcresOfGrading	8.00	13.00
tblLandUse	LandUseSquareFeet	574,630.00	574,625.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00

tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblProjectCharacteristics	OperationalYear	2014	2024

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2023	1.9805	12.4728	24.9986	0.0689	3.2816	0.5111	3.7927	0.8818	0.4777	1.3595	0.0000	5,644.2895	5,644.2895	0.5115	0.0000	5,655.0301
2024	61.1161	11.8651	24.4195	0.0689	3.2816	0.4627	3.7444	0.8819	0.4322	1.3140	0.0000	5,613.0993	5,613.0993	0.4784	0.0000	5,623.1453
Total	**63.0966**	**24.3379**	**49.4181**	**0.1379**	**6.5632**	**0.9738**	**7.5370**	**1.7637**	**0.9099**	**2.6735**	**0.0000**	**11,257.3887**	**11,257.3887**	**0.9898**	**0.0000**	**11,278.1754**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					

2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2023	1.9805	12.4728	24.9986	0.0689	3.2816	0.5111	3.7927	0.8818	0.4777	1.3595	0.0000	5,644.2895	5,644.2895	0.5115	0.0000	5,655.0301
2024	61.1161	11.8651	24.4195	0.0689	3.2816	0.4627	3.7444	0.8819	0.4322	1.3140	0.0000	5,613.0993	5,613.0993	0.4784	0.0000	5,623.1453
Total	**63.0966**	**24.3379**	**49.4181**	**0.1379**	**6.5632**	**0.9738**	**7.5370**	**1.7637**	**0.9099**	**2.6735**	**0.0000**	**11,257.3887**	**11,257.3887**	**0.9898**	**0.0000**	**11,278.1754**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2015	1/1/2015	5	1	
2	Site Preparation	Site Preparation	1/29/2015	1/29/2015	5	1	
3	Grading	Grading	8/1/2023	8/10/2023	5	8	
4	Trenching	Trenching	8/11/2023	8/24/2023	5	10	
5	Building Construction	Building Construction	8/25/2023	1/11/2024	5	100	
6	Paving	Paving	1/12/2024	1/25/2024	5	10	
7	Architectural Coating	Architectural Coating	1/26/2024	2/22/2024	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 13

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 105,000 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	162	0.38
Demolition	Rubber Tired Dozers	0	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	0	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Crawler Tractors	1	8.00	208	0.43
Grading	Excavators	0	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	0	8.00	255	0.40
Grading	Scrapers	0	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Trenching	Plate Compactors	1	8.00	8	0.43
Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Trenchers	1	8.00	80	0.50
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Generator Sets	1	4.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Welders	1	4.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	0	8.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	0	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	241.00	94.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	48.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.7233	0.0000	1.7233	0.1861	0.0000	0.1861			0.0000			0.0000
Off-Road	1.0398	10.6436	8.2158	0.0162		0.4976	0.4976		0.4578	0.4578		1,572.1598	1,572.1598	0.5085		1,582.8376
Total	**1.0398**	**10.6436**	**8.2158**	**0.0162**	**1.7233**	**0.4976**	**2.2209**	**0.1861**	**0.4578**	**0.6439**		**1,572.1598**	**1,572.1598**	**0.5085**		**1,582.8376**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0177	0.0216	0.2732	1.0900e-003	0.0894	6.3000e-004	0.0901	0.0237	5.8000e-004	0.0243		74.4546	74.4546	2.9900e-003		74.5174
Total	**0.0177**	**0.0216**	**0.2732**	**1.0900e-003**	**0.0894**	**6.3000e-004**	**0.0901**	**0.0237**	**5.8000e-004**	**0.0243**		**74.4546**	**74.4546**	**2.9900e-003**		**74.5174**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.7233	0.0000	1.7233	0.1861	0.0000	0.1861			0.0000			0.0000
Off-Road	1.0398	10.6436	8.2158	0.0162		0.4976	0.4976		0.4578	0.4578	0.0000	1,572.1598	1,572.1598	0.5085		1,582.8376
Total	**1.0398**	**10.6436**	**8.2158**	**0.0162**	**1.7233**	**0.4976**	**2.2209**	**0.1861**	**0.4578**	**0.6439**	**0.0000**	**1,572.1598**	**1,572.1598**	**0.5085**		**1,582.8376**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0177	0.0216	0.2732	1.0900e-003	0.0894	6.3000e-004	0.0901	0.0237	5.8000e-004	0.0243		74.4546	74.4546	2.9900e-003		74.5174
Total	**0.0177**	**0.0216**	**0.2732**	**1.0900e-003**	**0.0894**	**6.3000e-004**	**0.0901**	**0.0237**	**5.8000e-004**	**0.0243**		**74.4546**	**74.4546**	**2.9900e-003**		**74.5174**

3.5 Trenching - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6984	6.6387	7.3317	0.0102		0.3914	0.3914		0.3609	0.3609		973.2220	973.2220	0.3072		979.6729
Total	**0.6984**	**6.6387**	**7.3317**	**0.0102**		**0.3914**	**0.3914**		**0.3609**	**0.3609**		**973.2220**	**973.2220**	**0.3072**		**979.6729**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0221	0.0270	0.3416	1.3600e-003	0.1118	7.8000e-004	0.1126	0.0296	7.3000e-004	0.0304		93.0683	93.0683	3.7400e-003		93.1468

Total	**0.0221**	**0.0270**	**0.3416**	**1.3600e-003**	**0.1118**	**7.8000e-004**	**0.1126**	**0.0296**	**7.3000e-004**	**0.0304**		**93.0683**	**93.0683**	**3.7400e-003**		**93.1468**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6984	6.6387	7.3317	0.0102		0.3914	0.3914		0.3609	0.3609	0.0000	973.2220	973.2220	0.3072		979.6729
Total	**0.6984**	**6.6387**	**7.3317**	**0.0102**		**0.3914**	**0.3914**		**0.3609**	**0.3609**	**0.0000**	**973.2220**	**973.2220**	**0.3072**		**979.6729**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0221	0.0270	0.3416	1.3600e-003	0.1118	7.8000e-004	0.1126	0.0296	7.3000e-004	0.0304		93.0683	93.0683	3.7400e-003		93.1468
Total	**0.0221**	**0.0270**	**0.3416**	**1.3600e-003**	**0.1118**	**7.8000e-004**	**0.1126**	**0.0296**	**7.3000e-004**	**0.0304**		**93.0683**	**93.0683**	**3.7400e-003**		**93.1468**

3.6 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9086	8.4454	9.7508	0.0159		0.4102	0.4102		0.3847	0.3847		1,513.8172	1,513.8172	0.3803		1,521.8039
Total	**0.9086**	**8.4454**	**9.7508**	**0.0159**		**0.4102**	**0.4102**		**0.3847**	**0.3847**		**1,513.8172**	**1,513.8172**	**0.3803**		**1,521.8039**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5401	3.3770	7.0164	0.0202	0.5878	0.0820	0.6697	0.1674	0.0754	0.2428		1,887.5270	1,887.5270	0.0127		1,887.7938
Worker	0.5318	0.6504	8.2314	0.0329	2.6938	0.0189	2.7127	0.7144	0.0175	0.7319		2,242.9453	2,242.9453	0.0901		2,244.8373
Total	**1.0719**	**4.0274**	**15.2478**	**0.0530**	**3.2816**	**0.1009**	**3.3824**	**0.8818**	**0.0929**	**0.9748**		**4,130.4723**	**4,130.4723**	**0.1028**		**4,132.6311**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	0.9086	8.4454	9.7508	0.0159		0.4102	0.4102		0.3847	0.3847	0.0000	1,513.8172	1,513.8172	0.3803		1,521.8039
Total	**0.9086**	**8.4454**	**9.7508**	**0.0159**		**0.4102**	**0.4102**		**0.3847**	**0.3847**	**0.0000**	**1,513.8172**	**1,513.8172**	**0.3803**		**1,521.8039**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5401	3.3770	7.0164	0.0202	0.5878	0.0820	0.6697	0.1674	0.0754	0.2428		1,887.5270	1,887.5270	0.0127		1,887.7938
Worker	0.5318	0.6504	8.2314	0.0329	2.6938	0.0189	2.7127	0.7144	0.0175	0.7319		2,242.9453	2,242.9453	0.0901		2,244.8373
Total	**1.0719**	**4.0274**	**15.2478**	**0.0530**	**3.2816**	**0.1009**	**3.3824**	**0.8818**	**0.0929**	**0.9748**		**4,130.4723**	**4,130.4723**	**0.1028**		**4,132.6311**

3.6 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8519	7.8987	9.7121	0.0159		0.3599	0.3599		0.3374	0.3374		1,514.1918	1,514.1918	0.3786		1,522.1427
Total	**0.8519**	**7.8987**	**9.7121**	**0.0159**		**0.3599**	**0.3599**		**0.3374**	**0.3374**		**1,514.1918**	**1,514.1918**	**0.3786**		**1,522.1427**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5302	3.3489	6.9043	0.0201	0.5878	0.0838	0.6716	0.1674	0.0771	0.2446		1,887.1413	1,887.1413	0.0128		1,887.4093
Worker	0.5070	0.6176	7.8030	0.0329	2.6938	0.0190	2.7128	0.7144	0.0176	0.7321		2,211.7662	2,211.7662	0.0870		2,213.5933
Total	**1.0372**	**3.9665**	**14.7074**	**0.0530**	**3.2816**	**0.1028**	**3.3845**	**0.8819**	**0.0948**	**0.9766**		**4,098.9074**	**4,098.9074**	**0.0998**		**4,101.0026**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8519	7.8987	9.7121	0.0159		0.3599	0.3599		0.3374	0.3374	0.0000	1,514.1918	1,514.1918	0.3786		1,522.1427
Total	**0.8519**	**7.8987**	**9.7121**	**0.0159**		**0.3599**	**0.3599**		**0.3374**	**0.3374**	**0.0000**	**1,514.1918**	**1,514.1918**	**0.3786**		**1,522.1427**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5302	3.3489	6.9043	0.0201	0.5878	0.0838	0.6716	0.1674	0.0771	0.2446		1,887.1413	1,887.1413	0.0128		1,887.4093
Worker	0.5070	0.6176	7.8030	0.0329	2.6938	0.0190	2.7128	0.7144	0.0176	0.7321		2,211.7662	2,211.7662	0.0870		2,213.5933
Total	**1.0372**	**3.9665**	**14.7074**	**0.0530**	**3.2816**	**0.1028**	**3.3845**	**0.8819**	**0.0948**	**0.9766**		**4,098.9074**	**4,098.9074**	**0.0998**		**4,101.0026**

3.7 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2063	1.7496	2.7622	4.5500e-003		0.0819	0.0819		0.0762	0.0762		426.3762	426.3762	0.1296		429.0973
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2063**	**1.7496**	**2.7622**	**4.5500e-003**		**0.0819**	**0.0819**		**0.0762**	**0.0762**		**426.3762**	**426.3762**	**0.1296**		**429.0973**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0105	0.0128	0.1619	6.8000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.7000e-004	0.0152		45.8873	45.8873	1.8100e-003		45.9252

Total	**0.0105**	**0.0128**	**0.1619**	**6.8000e-004**	**0.0559**	**3.9000e-004**	**0.0563**	**0.0148**	**3.7000e-004**	**0.0152**		**45.8873**	**45.8873**	**1.8100e-003**		**45.9252**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2063	1.7496	2.7622	4.5500e-003		0.0819	0.0819		0.0762	0.0762	0.0000	426.3762	426.3762	0.1296		429.0973
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2063**	**1.7496**	**2.7622**	**4.5500e-003**		**0.0819**	**0.0819**		**0.0762**	**0.0762**	**0.0000**	**426.3762**	**426.3762**	**0.1296**		**429.0973**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0105	0.0128	0.1619	6.8000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.7000e-004	0.0152		45.8873	45.8873	1.8100e-003		45.9252
Total	**0.0105**	**0.0128**	**0.1619**	**6.8000e-004**	**0.0559**	**3.9000e-004**	**0.0563**	**0.0148**	**3.7000e-004**	**0.0152**		**45.8873**	**45.8873**	**1.8100e-003**		**45.9252**

3.8 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	60.8344					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.7809
Total	**61.0151**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.7809**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1010	0.1230	1.5541	6.5500e-003	0.5365	3.7900e-003	0.5403	0.1423	3.5100e-003	0.1458		440.5177	440.5177	0.0173		440.8817
Total	**0.1010**	**0.1230**	**1.5541**	**6.5500e-003**	**0.5365**	**3.7900e-003**	**0.5403**	**0.1423**	**3.5100e-003**	**0.1458**		**440.5177**	**440.5177**	**0.0173**		**440.8817**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Archit. Coating	60.8344					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.7809
Total	**61.0151**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.7809**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1010	0.1230	1.5541	6.5500e-003	0.5365	3.7900e-003	0.5403	0.1423	3.5100e-003	0.1458		440.5177	440.5177	0.0173		440.8817
Total	**0.1010**	**0.1230**	**1.5541**	**6.5500e-003**	**0.5365**	**3.7900e-003**	**0.5403**	**0.1423**	**3.5100e-003**	**0.1458**		**440.5177**	**440.5177**	**0.0173**		**440.8817**

Physical Education Outdoor Labs

Orange County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	574.63	1000sqft	13.19	574,625.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - modified

Off-road Equipment -

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Off-road Equipment - modified

Grading - modified

Architectural Coating - modified

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	287,313.00	105,000.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	861,938.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblConstructionPhase	NumDays	300.00	100.00
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	NumDays	30.00	8.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	10.00	1.00
tblConstructionPhase	PhaseEndDate	2/10/2015	8/10/2023
tblConstructionPhase	PhaseEndDate	1/2/2015	1/29/2015
tblConstructionPhase	PhaseStartDate	1/30/2015	8/1/2023
tblConstructionPhase	PhaseStartDate	1/2/2015	1/29/2015
tblGrading	AcresOfGrading	8.00	13.00
tblLandUse	LandUseSquareFeet	574,630.00	574,625.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00

tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblProjectCharacteristics	OperationalYear	2014	2024

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2023	2.0539	12.5953	26.1841	0.0670	3.2816	0.5117	3.7933	0.8818	0.4783	1.3601	0.0000	5,508.6583	5,508.6583	0.5115	0.0000	5,519.3990
2024	61.1210	11.9828	25.5949	0.0670	3.2816	0.4634	3.7450	0.8819	0.4328	1.3146	0.0000	5,478.9169	5,478.9169	0.4789	0.0000	5,488.9738
Total	**63.1750**	**24.5781**	**51.7789**	**0.1340**	**6.5632**	**0.9751**	**7.5383**	**1.7637**	**0.9111**	**2.6747**	**0.0000**	**10,987.5752**	**10,987.5752**	**0.9904**	**0.0000**	**11,008.3728**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					

2015	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2023	2.0539	12.5953	26.1841	0.0670	3.2816	0.5117	3.7933	0.8818	0.4783	1.3601	0.0000	5,508.6583	5,508.6583	0.5115	0.0000	5,519.3990
2024	61.1210	11.9828	25.5949	0.0670	3.2816	0.4634	3.7450	0.8819	0.4328	1.3146	0.0000	5,478.9169	5,478.9169	0.4789	0.0000	5,488.9738
Total	**63.1750**	**24.5781**	**51.7789**	**0.1340**	**6.5632**	**0.9751**	**7.5383**	**1.7637**	**0.9111**	**2.6747**	**0.0000**	**10,987.5752**	**10,987.5752**	**0.9904**	**0.0000**	**11,008.3728**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2015	1/1/2015	5	1	
2	Site Preparation	Site Preparation	1/29/2015	1/29/2015	5	1	
3	Grading	Grading	8/1/2023	8/10/2023	5	8	
4	Trenching	Trenching	8/11/2023	8/24/2023	5	10	
5	Building Construction	Building Construction	8/25/2023	1/11/2024	5	100	
6	Paving	Paving	1/12/2024	1/25/2024	5	10	
7	Architectural Coating	Architectural Coating	1/26/2024	2/22/2024	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 13

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 105,000 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	162	0.38
Demolition	Rubber Tired Dozers	0	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	0	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Crawler Tractors	1	8.00	208	0.43
Grading	Excavators	0	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	0	8.00	255	0.40
Grading	Scrapers	0	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Trenching	Plate Compactors	1	8.00	8	0.43
Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Trenchers	1	8.00	80	0.50
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Generator Sets	1	4.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Welders	1	4.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	0	8.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	0	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	241.00	94.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	48.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.7233	0.0000	1.7233	0.1861	0.0000	0.1861			0.0000			0.0000
Off-Road	1.0398	10.6436	8.2158	0.0162		0.4976	0.4976		0.4578	0.4578		1,572.1598	1,572.1598	0.5085		1,582.8376
Total	**1.0398**	**10.6436**	**8.2158**	**0.0162**	**1.7233**	**0.4976**	**2.2209**	**0.1861**	**0.4578**	**0.6439**		**1,572.1598**	**1,572.1598**	**0.5085**		**1,582.8376**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0185	0.0237	0.2536	1.0300e-003	0.0894	6.3000e-004	0.0901	0.0237	5.8000e-004	0.0243		70.4875	70.4875	2.9900e-003		70.5503
Total	**0.0185**	**0.0237**	**0.2536**	**1.0300e-003**	**0.0894**	**6.3000e-004**	**0.0901**	**0.0237**	**5.8000e-004**	**0.0243**		**70.4875**	**70.4875**	**2.9900e-003**		**70.5503**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.7233	0.0000	1.7233	0.1861	0.0000	0.1861			0.0000			0.0000
Off-Road	1.0398	10.6436	8.2158	0.0162		0.4976	0.4976		0.4578	0.4578	0.0000	1,572.1598	1,572.1598	0.5085		1,582.8376
Total	**1.0398**	**10.6436**	**8.2158**	**0.0162**	**1.7233**	**0.4976**	**2.2209**	**0.1861**	**0.4578**	**0.6439**	**0.0000**	**1,572.1598**	**1,572.1598**	**0.5085**		**1,582.8376**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0185	0.0237	0.2536	1.0300e-003	0.0894	6.3000e-004	0.0901	0.0237	5.8000e-004	0.0243		70.4875	70.4875	2.9900e-003		70.5503
Total	**0.0185**	**0.0237**	**0.2536**	**1.0300e-003**	**0.0894**	**6.3000e-004**	**0.0901**	**0.0237**	**5.8000e-004**	**0.0243**		**70.4875**	**70.4875**	**2.9900e-003**		**70.5503**

3.5 Trenching - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6984	6.6387	7.3317	0.0102		0.3914	0.3914		0.3609	0.3609		973.2220	973.2220	0.3072		979.6729
Total	**0.6984**	**6.6387**	**7.3317**	**0.0102**		**0.3914**	**0.3914**		**0.3609**	**0.3609**		**973.2220**	**973.2220**	**0.3072**		**979.6729**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0231	0.0296	0.3170	1.2900e-003	0.1118	7.8000e-004	0.1126	0.0296	7.3000e-004	0.0304		88.1093	88.1093	3.7400e-003		88.1878

Total	**0.0231**	**0.0296**	**0.3170**	**1.2900e-003**	**0.1118**	**7.8000e-004**	**0.1126**	**0.0296**	**7.3000e-004**	**0.0304**		**88.1093**	**88.1093**	**3.7400e-003**		**88.1878**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6984	6.6387	7.3317	0.0102		0.3914	0.3914		0.3609	0.3609	0.0000	973.2220	973.2220	0.3072		979.6729
Total	**0.6984**	**6.6387**	**7.3317**	**0.0102**		**0.3914**	**0.3914**		**0.3609**	**0.3609**	**0.0000**	**973.2220**	**973.2220**	**0.3072**		**979.6729**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0231	0.0296	0.3170	1.2900e-003	0.1118	7.8000e-004	0.1126	0.0296	7.3000e-004	0.0304		88.1093	88.1093	3.7400e-003		88.1878
Total	**0.0231**	**0.0296**	**0.3170**	**1.2900e-003**	**0.1118**	**7.8000e-004**	**0.1126**	**0.0296**	**7.3000e-004**	**0.0304**		**88.1093**	**88.1093**	**3.7400e-003**		**88.1878**

3.6 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9086	8.4454	9.7508	0.0159		0.4102	0.4102		0.3847	0.3847		1,513.8172	1,513.8172	0.3803		1,521.8039
Total	**0.9086**	**8.4454**	**9.7508**	**0.0159**		**0.4102**	**0.4102**		**0.3847**	**0.3847**		**1,513.8172**	**1,513.8172**	**0.3803**		**1,521.8039**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5878	3.4357	8.7935	0.0200	0.5878	0.0826	0.6704	0.1674	0.0760	0.2434		1,871.4064	1,871.4064	0.0132		1,871.6840
Worker	0.5576	0.7142	7.6398	0.0311	2.6938	0.0189	2.7127	0.7144	0.0175	0.7319		2,123.4348	2,123.4348	0.0901		2,125.3268
Total	**1.1453**	**4.1499**	**16.4333**	**0.0511**	**3.2816**	**0.1015**	**3.3831**	**0.8818**	**0.0935**	**0.9754**		**3,994.8412**	**3,994.8412**	**0.1033**		**3,997.0108**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	0.9086	8.4454	9.7508	0.0159		0.4102	0.4102		0.3847	0.3847	0.0000	1,513.8172	1,513.8172	0.3803		1,521.8039
Total	**0.9086**	**8.4454**	**9.7508**	**0.0159**		**0.4102**	**0.4102**		**0.3847**	**0.3847**	**0.0000**	**1,513.8172**	**1,513.8172**	**0.3803**		**1,521.8039**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5878	3.4357	8.7935	0.0200	0.5878	0.0826	0.6704	0.1674	0.0760	0.2434		1,871.4064	1,871.4064	0.0132		1,871.6840
Worker	0.5576	0.7142	7.6398	0.0311	2.6938	0.0189	2.7127	0.7144	0.0175	0.7319		2,123.4348	2,123.4348	0.0901		2,125.3268
Total	**1.1453**	**4.1499**	**16.4333**	**0.0511**	**3.2816**	**0.1015**	**3.3831**	**0.8818**	**0.0935**	**0.9754**		**3,994.8412**	**3,994.8412**	**0.1033**		**3,997.0108**

3.6 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8519	7.8987	9.7121	0.0159		0.3599	0.3599		0.3374	0.3374		1,514.1918	1,514.1918	0.3786		1,522.1427
Total	**0.8519**	**7.8987**	**9.7121**	**0.0159**		**0.3599**	**0.3599**		**0.3374**	**0.3374**		**1,514.1918**	**1,514.1918**	**0.3786**		**1,522.1427**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5763	3.4062	8.6495	0.0200	0.5878	0.0845	0.6723	0.1674	0.0777	0.2452		1,871.0190	1,871.0190	0.0133		1,871.2979
Worker	0.5317	0.6780	7.2333	0.0311	2.6938	0.0190	2.7128	0.7144	0.0176	0.7321		2,093.7060	2,093.7060	0.0870		2,095.5332
Total	**1.1080**	**4.0841**	**15.8828**	**0.0511**	**3.2816**	**0.1035**	**3.3851**	**0.8819**	**0.0954**	**0.9772**		**3,964.7250**	**3,964.7250**	**0.1003**		**3,966.8311**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8519	7.8987	9.7121	0.0159		0.3599	0.3599		0.3374	0.3374	0.0000	1,514.1918	1,514.1918	0.3786		1,522.1427
Total	**0.8519**	**7.8987**	**9.7121**	**0.0159**		**0.3599**	**0.3599**		**0.3374**	**0.3374**	**0.0000**	**1,514.1918**	**1,514.1918**	**0.3786**		**1,522.1427**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5763	3.4062	8.6495	0.0200	0.5878	0.0845	0.6723	0.1674	0.0777	0.2452		1,871.0190	1,871.0190	0.0133		1,871.2979
Worker	0.5317	0.6780	7.2333	0.0311	2.6938	0.0190	2.7128	0.7144	0.0176	0.7321		2,093.7060	2,093.7060	0.0870		2,095.5332
Total	**1.1080**	**4.0841**	**15.8828**	**0.0511**	**3.2816**	**0.1035**	**3.3851**	**0.8819**	**0.0954**	**0.9772**		**3,964.7250**	**3,964.7250**	**0.1003**		**3,966.8311**

3.7 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2063	1.7496	2.7622	4.5500e-003		0.0819	0.0819		0.0762	0.0762		426.3762	426.3762	0.1296		429.0973
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2063**	**1.7496**	**2.7622**	**4.5500e-003**		**0.0819**	**0.0819**		**0.0762**	**0.0762**		**426.3762**	**426.3762**	**0.1296**		**429.0973**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0110	0.0141	0.1501	6.5000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.7000e-004	0.0152		43.4379	43.4379	1.8100e-003		43.4758

Total	**0.0110**	**0.0141**	**0.1501**	**6.5000e-004**	**0.0559**	**3.9000e-004**	**0.0563**	**0.0148**	**3.7000e-004**	**0.0152**		**43.4379**	**43.4379**	**1.8100e-003**		**43.4758**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2063	1.7496	2.7622	4.5500e-003		0.0819	0.0819		0.0762	0.0762	0.0000	426.3762	426.3762	0.1296		429.0973
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2063**	**1.7496**	**2.7622**	**4.5500e-003**		**0.0819**	**0.0819**		**0.0762**	**0.0762**	**0.0000**	**426.3762**	**426.3762**	**0.1296**		**429.0973**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0110	0.0141	0.1501	6.5000e-004	0.0559	3.9000e-004	0.0563	0.0148	3.7000e-004	0.0152		43.4379	43.4379	1.8100e-003		43.4758
Total	**0.0110**	**0.0141**	**0.1501**	**6.5000e-004**	**0.0559**	**3.9000e-004**	**0.0563**	**0.0148**	**3.7000e-004**	**0.0152**		**43.4379**	**43.4379**	**1.8100e-003**		**43.4758**

3.8 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	60.8344					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.7809
Total	**61.0151**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.7809**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1059	0.1350	1.4407	6.1900e-003	0.5365	3.7900e-003	0.5403	0.1423	3.5100e-003	0.1458		417.0037	417.0037	0.0173		417.3676
Total	**0.1059**	**0.1350**	**1.4407**	**6.1900e-003**	**0.5365**	**3.7900e-003**	**0.5403**	**0.1423**	**3.5100e-003**	**0.1458**		**417.0037**	**417.0037**	**0.0173**		**417.3676**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Archit. Coating	60.8344					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.7809
Total	**61.0151**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.7809**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1059	0.1350	1.4407	6.1900e-003	0.5365	3.7900e-003	0.5403	0.1423	3.5100e-003	0.1458		417.0037	417.0037	0.0173		417.3676
Total	**0.1059**	**0.1350**	**1.4407**	**6.1900e-003**	**0.5365**	**3.7900e-003**	**0.5403**	**0.1423**	**3.5100e-003**	**0.1458**		**417.0037**	**417.0037**	**0.0173**		**417.3676**

EXISTING OPERATIONS

Annual, Summer, and Winter Emissions

Existing Conditions Operational Emissions 2014

Orange County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Day-Care Center	13.11	1000sqft	0.30	13,110.00	0
Junior College (2Yr)	638.92	1000sqft	14.67	638,915.00	0
Parking Lot	1,209.38	1000sqft	27.76	1,209,375.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - modified

Vehicle Trips - modified

Area Coating - modified

Energy Use - modified

Water And Wastewater - modified

Solid Waste - modified

Table Name	Column Name	Default Value	New Value
tblEnergyUse	LightingElect	3.30	0.00

tblEnergyUse	LightingElect	5.59	4.38
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	NT24E	1.51	0.00
tblEnergyUse	NT24E	2.72	2.13
tblEnergyUse	NT24NG	1.03	0.00
tblEnergyUse	NT24NG	5.21	9.94
tblEnergyUse	T24E	2.46	0.00
tblEnergyUse	T24E	7.10	5.56
tblEnergyUse	T24NG	12.37	0.00
tblEnergyUse	T24NG	12.16	23.19
tblLandUse	LandUseSquareFeet	1,209,380.00	1,209,375.00
tblSolidWaste	SolidWasteGenerationRate	17.04	0.00
tblSolidWaste	SolidWasteGenerationRate	830.58	108.00
tblVehicleTrips	ST_TR	6.21	0.00
tblVehicleTrips	ST_TR	11.23	9.30
tblVehicleTrips	SU_TR	5.83	0.00
tblVehicleTrips	SU_TR	1.21	1.00
tblVehicleTrips	WD_TR	79.26	0.00
tblVehicleTrips	WD_TR	27.49	22.76
tblWater	IndoorWaterUseRate	562,282.23	0.00
tblWater	IndoorWaterUseRate	31,337,917.35	17,923,860.35
tblWater	OutdoorWaterUseRate	1,445,868.59	0.00
tblWater	OutdoorWaterUseRate	49,015,716.89	28,034,755.65

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	7.5263	2.4000e-004	0.0248	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.0462	0.0462	1.4000e-004	0.0000	0.0491
Energy	0.1141	1.0376	0.8716	6.2300e-003		0.0789	0.0789		0.0789	0.0789	0.0000	3,336.3997	3,336.3997	0.1231	0.0417	3,351.9105
Mobile	7.6217	19.4389	87.0496	0.1771	12.9163	0.2679	13.1841	3.4505	0.2461	3.6966	0.0000	14,798.6073	14,798.6073	0.6702	0.0000	14,812.6816
Waste						0.0000	0.0000		0.0000	0.0000	21.9230	0.0000	21.9230	1.2956	0.0000	49.1309
Water						0.0000	0.0000		0.0000	0.0000	5.6864	155.9188	161.6052	0.5912	0.0153	178.7556
Total	**15.2621**	**20.4767**	**87.9460**	**0.1834**	**12.9163**	**0.3468**	**13.2631**	**3.4505**	**0.3250**	**3.7755**	**27.6094**	**18,290.9719**	**18,318.5814**	**2.6803**	**0.0570**	**18,392.5276**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	7.5263	2.4000e-004	0.0248	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.0462	0.0462	1.4000e-004	0.0000	0.0491
Energy	0.1141	1.0376	0.8716	6.2300e-003		0.0789	0.0789		0.0789	0.0789	0.0000	3,336.3997	3,336.3997	0.1231	0.0417	3,351.9105
Mobile	7.6217	19.4389	87.0496	0.1771	12.9163	0.2679	13.1841	3.4505	0.2461	3.6966	0.0000	14,798.6073	14,798.6073	0.6702	0.0000	14,812.6816
Waste						0.0000	0.0000		0.0000	0.0000	21.9230	0.0000	21.9230	1.2956	0.0000	49.1309
Water						0.0000	0.0000		0.0000	0.0000	5.6864	155.9188	161.6052	0.5911	0.0153	178.7465
Total	**15.2621**	**20.4767**	**87.9460**	**0.1834**	**12.9163**	**0.3468**	**13.2631**	**3.4505**	**0.3250**	**3.7755**	**27.6094**	**18,290.9719**	**18,318.5814**	**2.6802**	**0.0570**	**18,392.5186**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	7.6217	19.4389	87.0496	0.1771	12.9163	0.2679	13.1841	3.4505	0.2461	3.6966	0.0000	14,798.6073	14,798.6073	0.6702	0.0000	14,812.6816
Unmitigated	7.6217	19.4389	87.0496	0.1771	12.9163	0.2679	13.1841	3.4505	0.2461	3.6966	0.0000	14,798.6073	14,798.6073	0.6702	0.0000	14,812.6816

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Day-Care Center	0.00	0.00	0.00		
Junior College (2Yr)	14,541.71	5,941.91	638.92	34,211,750	34,211,750
Parking Lot	0.00	0.00	0.00		
Total	14,541.71	5,941.91	638.92	34,211,750	34,211,750

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Day-Care Center	16.60	8.40	6.90	12.70	82.30	5.00	28	58	14
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1

Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.511766	0.057390	0.191335	0.154102	0.040813	0.005872	0.014592	0.013169	0.001415	0.002132	0.004680	0.000514	0.002220

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,206.8344	2,206.8344	0.1014	0.0210	2,215.4709
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,206.8344	2,206.8344	0.1014	0.0210	2,215.4709
NaturalGas Mitigated	0.1141	1.0376	0.8716	6.2300e-003		0.0789	0.0789		0.0789	0.0789	0.0000	1,129.5653	1,129.5653	0.0217	0.0207	1,136.4396
NaturalGas Unmitigated	0.1141	1.0376	0.8716	6.2300e-003		0.0789	0.0789		0.0789	0.0789	0.0000	1,129.5653	1,129.5653	0.0217	0.0207	1,136.4396

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					

Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Day-Care Center	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	2.11673e+007	0.1141	1.0376	0.8716	6.2300e-003		0.0789	0.0789		0.0789	0.0789	0.0000	1,129.5653	1,129.5653	0.0217	0.0207	1,136.4396
Total		**0.1141**	**1.0376**	**0.8716**	**6.2300e-003**		**0.0789**	**0.0789**		**0.0789**	**0.0789**	**0.0000**	**1,129.5653**	**1,129.5653**	**0.0217**	**0.0207**	**1,136.4396**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Day-Care Center	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	2.11673e+007	0.1141	1.0376	0.8716	6.2300e-003		0.0789	0.0789		0.0789	0.0789	0.0000	1,129.5653	1,129.5653	0.0217	0.0207	1,136.4396
Total		**0.1141**	**1.0376**	**0.8716**	**6.2300e-003**		**0.0789**	**0.0789**		**0.0789**	**0.0789**	**0.0000**	**1,129.5653**	**1,129.5653**	**0.0217**	**0.0207**	**1,136.4396**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Day-Care Center	0	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	7.7117e+006	2,206.8344	0.1014	0.0210	2,215.4709
Parking Lot	0	0.0000	0.0000	0.0000	0.0000

Total		**2,206.8344**	**0.1014**	**0.0210**	**2,215.4709**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Day-Care Center	0	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	7.7117e+006	2,206.8344	0.1014	0.0210	2,215.4709
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**2,206.8344**	**0.1014**	**0.0210**	**2,215.4709**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	7.5263	2.4000e-004	0.0248	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.0462	0.0462	1.4000e-004	0.0000	0.0491
Unmitigated	7.5263	2.4000e-004	0.0248	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.0462	0.0462	1.4000e-004	0.0000	0.0491

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.7976					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	6.7262					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.5100e-003	2.4000e-004	0.0248	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.0462	0.0462	1.4000e-004	0.0000	0.0491
Total	**7.5263**	**2.4000e-004**	**0.0248**	**0.0000**		**9.0000e-005**	**9.0000e-005**		**9.0000e-005**	**9.0000e-005**	**0.0000**	**0.0462**	**0.0462**	**1.4000e-004**	**0.0000**	**0.0491**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.7976					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	6.7262					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.5100e-003	2.4000e-004	0.0248	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.0462	0.0462	1.4000e-004	0.0000	0.0491
Total	**7.5263**	**2.4000e-004**	**0.0248**	**0.0000**		**9.0000e-005**	**9.0000e-005**		**9.0000e-005**	**9.0000e-005**	**0.0000**	**0.0462**	**0.0462**	**1.4000e-004**	**0.0000**	**0.0491**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	161.6052	0.5911	0.0153	178.7465
Unmitigated	161.6052	0.5912	0.0153	178.7556

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Day-Care Center	0 / 0	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	17.9239 / 28.0348	161.6052	0.5912	0.0153	178.7556
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**161.6052**	**0.5912**	**0.0153**	**178.7556**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Day-Care Center	0 / 0	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	17.9239 / 28.0348	161.6052	0.5911	0.0153	178.7465

Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**161.6052**	**0.5911**	**0.0153**	**178.7465**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	21.9230	1.2956	0.0000	49.1309
Unmitigated	21.9230	1.2956	0.0000	49.1309

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Day-Care Center	0	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	108	21.9230	1.2956	0.0000	49.1309
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**21.9230**	**1.2956**	**0.0000**	**49.1309**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Day-Care Center	0	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	108	21.9230	1.2956	0.0000	49.1309
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**21.9230**	**1.2956**	**0.0000**	**49.1309**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Existing Conditions Operational Emissions 2014

Orange County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Day-Care Center	13.11	1000sqft	0.30	13,110.00	0
Junior College (2Yr)	638.92	1000sqft	14.67	638,915.00	0
Parking Lot	1,209.38	1000sqft	27.76	1,209,375.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - modified

Vehicle Trips - modified

Area Coating - modified

Energy Use - modified

Water And Wastewater - modified

Solid Waste - modified

Table Name	Column Name	Default Value	New Value
tblEnergyUse	LightingElect	3.30	0.00

tblEnergyUse	LightingElect	5.59	4.38
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	NT24E	1.51	0.00
tblEnergyUse	NT24E	2.72	2.13
tblEnergyUse	NT24NG	1.03	0.00
tblEnergyUse	NT24NG	5.21	9.94
tblEnergyUse	T24E	2.46	0.00
tblEnergyUse	T24E	7.10	5.56
tblEnergyUse	T24NG	12.37	0.00
tblEnergyUse	T24NG	12.16	23.19
tblLandUse	LandUseSquareFeet	1,209,380.00	1,209,375.00
tblSolidWaste	SolidWasteGenerationRate	17.04	0.00
tblSolidWaste	SolidWasteGenerationRate	830.58	108.00
tblVehicleTrips	ST_TR	6.21	0.00
tblVehicleTrips	ST_TR	11.23	9.30
tblVehicleTrips	SU_TR	5.83	0.00
tblVehicleTrips	SU_TR	1.21	1.00
tblVehicleTrips	WD_TR	79.26	0.00
tblVehicleTrips	WD_TR	27.49	22.76
tblWater	IndoorWaterUseRate	562,282.23	0.00
tblWater	IndoorWaterUseRate	31,337,917.35	17,923,860.35
tblWater	OutdoorWaterUseRate	1,445,868.59	0.00
tblWater	OutdoorWaterUseRate	49,015,716.89	28,034,755.65

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	41.2461	1.9400e-003	0.1987	1.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004		0.4074	0.4074	1.2200e-003		0.4330
Energy	0.6254	5.6855	4.7759	0.0341		0.4321	0.4321		0.4321	0.4321		6,822.6443	6,822.6443	0.1308	0.1251	6,864.1658
Mobile	53.6556	127.2661	613.9376	1.2933	92.7486	1.8862	94.6348	24.7415	1.7328	26.4743		119,046.9037	119,046.9037	5.2165		119,156.4507
Total	**95.5271**	**132.9535**	**618.9121**	**1.3274**	**92.7486**	**2.3191**	**95.0677**	**24.7415**	**2.1656**	**26.9071**		**125,869.9553**	**125,869.9553**	**5.3485**	**0.1251**	**126,021.0494**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	41.2461	1.9400e-003	0.1987	1.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004		0.4074	0.4074	1.2200e-003		0.4330
Energy	0.6254	5.6855	4.7759	0.0341		0.4321	0.4321		0.4321	0.4321		6,822.6443	6,822.6443	0.1308	0.1251	6,864.1658
Mobile	53.6556	127.2661	613.9376	1.2933	92.7486	1.8862	94.6348	24.7415	1.7328	26.4743		119,046.9037	119,046.9037	5.2165		119,156.4507
Total	**95.5271**	**132.9535**	**618.9121**	**1.3274**	**92.7486**	**2.3191**	**95.0677**	**24.7415**	**2.1656**	**26.9071**		**125,869.9553**	**125,869.9553**	**5.3485**	**0.1251**	**126,021.0494**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	53.6556	127.2661	613.9376	1.2933	92.7486	1.8862	94.6348	24.7415	1.7328	26.4743		119,046.9037	119,046.9037	5.2165		119,156.4507
Unmitigated	53.6556	127.2661	613.9376	1.2933	92.7486	1.8862	94.6348	24.7415	1.7328	26.4743		119,046.9037	119,046.9037	5.2165		119,156.4507

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Day-Care Center	0.00	0.00	0.00		
Junior College (2Yr)	14,541.71	5,941.91	638.92	34,211,750	34,211,750
Parking Lot	0.00	0.00	0.00		
Total	14,541.71	5,941.91	638.92	34,211,750	34,211,750

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Day-Care Center	16.60	8.40	6.90	12.70	82.30	5.00	28	58	14
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.511766	0.057390	0.191335	0.154102	0.040813	0.005872	0.014592	0.013169	0.001415	0.002132	0.004680	0.000514	0.002220

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.6254	5.6855	4.7759	0.0341		0.4321	0.4321		0.4321	0.4321		6,822.6443	6,822.6443	0.1308	0.1251	6,864.1658
NaturalGas Unmitigated	0.6254	5.6855	4.7759	0.0341		0.4321	0.4321		0.4321	0.4321		6,822.6443	6,822.6443	0.1308	0.1251	6,864.1658

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Junior College (2Yr)	57992.5	0.6254	5.6855	4.7759	0.0341		0.4321	0.4321		0.4321	0.4321		6,822.6443	6,822.6443	0.1308	0.1251	6,864.1658
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Day-Care Center	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.6254**	**5.6855**	**4.7759**	**0.0341**		**0.4321**	**0.4321**		**0.4321**	**0.4321**		**6,822.6443**	**6,822.6443**	**0.1308**	**0.1251**	**6,864.1658**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Day-Care Center	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	57.9925	0.6254	5.6855	4.7759	0.0341		0.4321	0.4321		0.4321	0.4321		6,822.6443	6,822.6443	0.1308	0.1251	6,864.1658
Total		**0.6254**	**5.6855**	**4.7759**	**0.0341**		**0.4321**	**0.4321**		**0.4321**	**0.4321**		**6,822.6443**	**6,822.6443**	**0.1308**	**0.1251**	**6,864.1658**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	41.2461	1.9400e-003	0.1987	1.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004		0.4074	0.4074	1.2200e-003		0.4330
Unmitigated	41.2461	1.9400e-003	0.1987	1.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004		0.4074	0.4074	1.2200e-003		0.4330

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.3703					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	36.8557					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0201	1.9400e-003	0.1987	1.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004		0.4074	0.4074	1.2200e-003		0.4330
Total	**41.2461**	**1.9400e-003**	**0.1987**	**1.0000e-005**		**7.2000e-004**	**7.2000e-004**		**7.2000e-004**	**7.2000e-004**		**0.4074**	**0.4074**	**1.2200e-003**		**0.4330**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.3703					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	36.8557					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0201	1.9400e-003	0.1987	1.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004		0.4074	0.4074	1.2200e-003		0.4330
Total	**41.2461**	**1.9400e-003**	**0.1987**	**1.0000e-005**		**7.2000e-004**	**7.2000e-004**		**7.2000e-004**	**7.2000e-004**		**0.4074**	**0.4074**	**1.2200e-003**		**0.4330**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Existing Conditions Operational Emissions 2014

Orange County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Day-Care Center	13.11	1000sqft	0.30	13,110.00	0
Junior College (2Yr)	638.92	1000sqft	14.67	638,915.00	0
Parking Lot	1,209.38	1000sqft	27.76	1,209,375.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - modified

Vehicle Trips - modified

Area Coating - modified

Energy Use - modified

Water And Wastewater - modified

Solid Waste - modified

Table Name	Column Name	Default Value	New Value
tblEnergyUse	LightingElect	3.30	0.00

tblEnergyUse	LightingElect	5.59	4.38
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	NT24E	1.51	0.00
tblEnergyUse	NT24E	2.72	2.13
tblEnergyUse	NT24NG	1.03	0.00
tblEnergyUse	NT24NG	5.21	9.94
tblEnergyUse	T24E	2.46	0.00
tblEnergyUse	T24E	7.10	5.56
tblEnergyUse	T24NG	12.37	0.00
tblEnergyUse	T24NG	12.16	23.19
tblLandUse	LandUseSquareFeet	1,209,380.00	1,209,375.00
tblSolidWaste	SolidWasteGenerationRate	17.04	0.00
tblSolidWaste	SolidWasteGenerationRate	830.58	108.00
tblVehicleTrips	ST_TR	6.21	0.00
tblVehicleTrips	ST_TR	11.23	9.30
tblVehicleTrips	SU_TR	5.83	0.00
tblVehicleTrips	SU_TR	1.21	1.00
tblVehicleTrips	WD_TR	79.26	0.00
tblVehicleTrips	WD_TR	27.49	22.76
tblWater	IndoorWaterUseRate	562,282.23	0.00
tblWater	IndoorWaterUseRate	31,337,917.35	17,923,860.35
tblWater	OutdoorWaterUseRate	1,445,868.59	0.00
tblWater	OutdoorWaterUseRate	49,015,716.89	28,034,755.65

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	41.2461	1.9400e-003	0.1987	1.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004		0.4074	0.4074	1.2200e-003		0.4330
Energy	0.6254	5.6855	4.7759	0.0341		0.4321	0.4321		0.4321	0.4321		6,822.6443	6,822.6443	0.1308	0.1251	6,864.1658
Mobile	57.0686	134.5194	610.2501	1.2350	92.7486	1.8995	94.6481	24.7415	1.7450	26.4865		113,752.3403	113,752.3403	5.2187		113,861.9324
Total	**98.9401**	**140.2069**	**615.2247**	**1.2691**	**92.7486**	**2.3323**	**95.0809**	**24.7415**	**2.1778**	**26.9193**		**120,575.3920**	**120,575.3920**	**5.3507**	**0.1251**	**120,726.5311**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	41.2461	1.9400e-003	0.1987	1.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004		0.4074	0.4074	1.2200e-003		0.4330
Energy	0.6254	5.6855	4.7759	0.0341		0.4321	0.4321		0.4321	0.4321		6,822.6443	6,822.6443	0.1308	0.1251	6,864.1658
Mobile	57.0686	134.5194	610.2501	1.2350	92.7486	1.8995	94.6481	24.7415	1.7450	26.4865		113,752.3403	113,752.3403	5.2187		113,861.9324
Total	**98.9401**	**140.2069**	**615.2247**	**1.2691**	**92.7486**	**2.3323**	**95.0809**	**24.7415**	**2.1778**	**26.9193**		**120,575.3920**	**120,575.3920**	**5.3507**	**0.1251**	**120,726.5311**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	57.0686	134.5194	610.2501	1.2350	92.7486	1.8995	94.6481	24.7415	1.7450	26.4865		113,752.3403	113,752.3403	5.2187		113,861.9324
Unmitigated	57.0686	134.5194	610.2501	1.2350	92.7486	1.8995	94.6481	24.7415	1.7450	26.4865		113,752.3403	113,752.3403	5.2187		113,861.9324

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Day-Care Center	0.00	0.00	0.00		
Junior College (2Yr)	14,541.71	5,941.91	638.92	34,211,750	34,211,750
Parking Lot	0.00	0.00	0.00		
Total	14,541.71	5,941.91	638.92	34,211,750	34,211,750

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Day-Care Center	16.60	8.40	6.90	12.70	82.30	5.00	28	58	14
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.511766	0.057390	0.191335	0.154102	0.040813	0.005872	0.014592	0.013169	0.001415	0.002132	0.004680	0.000514	0.002220

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.6254	5.6855	4.7759	0.0341		0.4321	0.4321		0.4321	0.4321		6,822.6443	6,822.6443	0.1308	0.1251	6,864.1658
NaturalGas Unmitigated	0.6254	5.6855	4.7759	0.0341		0.4321	0.4321		0.4321	0.4321		6,822.6443	6,822.6443	0.1308	0.1251	6,864.1658

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Junior College (2Yr)	57992.5	0.6254	5.6855	4.7759	0.0341		0.4321	0.4321		0.4321	0.4321		6,822.6443	6,822.6443	0.1308	0.1251	6,864.1658
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Day-Care Center	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.6254**	**5.6855**	**4.7759**	**0.0341**		**0.4321**	**0.4321**		**0.4321**	**0.4321**		**6,822.6443**	**6,822.6443**	**0.1308**	**0.1251**	**6,864.1658**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Day-Care Center	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	57.9925	0.6254	5.6855	4.7759	0.0341		0.4321	0.4321		0.4321	0.4321		6,822.6443	6,822.6443	0.1308	0.1251	6,864.1658
Total		**0.6254**	**5.6855**	**4.7759**	**0.0341**		**0.4321**	**0.4321**		**0.4321**	**0.4321**		**6,822.6443**	**6,822.6443**	**0.1308**	**0.1251**	**6,864.1658**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	41.2461	1.9400e-003	0.1987	1.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004		0.4074	0.4074	1.2200e-003		0.4330
Unmitigated	41.2461	1.9400e-003	0.1987	1.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004		0.4074	0.4074	1.2200e-003		0.4330

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.3703					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	36.8557					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0201	1.9400e-003	0.1987	1.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004		0.4074	0.4074	1.2200e-003		0.4330
Total	**41.2461**	**1.9400e-003**	**0.1987**	**1.0000e-005**		**7.2000e-004**	**7.2000e-004**		**7.2000e-004**	**7.2000e-004**		**0.4074**	**0.4074**	**1.2200e-003**		**0.4330**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.3703					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	36.8557					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0201	1.9400e-003	0.1987	1.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004		0.4074	0.4074	1.2200e-003		0.4330
Total	**41.2461**	**1.9400e-003**	**0.1987**	**1.0000e-005**		**7.2000e-004**	**7.2000e-004**		**7.2000e-004**	**7.2000e-004**		**0.4074**	**0.4074**	**1.2200e-003**		**0.4330**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

PROPOSED PROJECT OPERATION

Annual, Summer, and Winter Emissions

2024 Existing Facilities Operation

Orange County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Day-Care Center	8.75	1000sqft	0.20	8,750.00	0
Junior College (2Yr)	376.74	1000sqft	8.65	376,742.00	0
Parking Lot	1,209.38	1000sqft	27.76	1,209,380.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	503.21	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - modified

Land Use - modified

Vehicle Trips - modified

Area Coating - modified

Energy Use - modified

Water And Wastewater - modified

Solid Waste - modified

Table Name	Column Name	Default Value	New Value
tblEnergyUse	LightingElect	3.09	0.00

tblEnergyUse	LightingElect	5.23	4.38
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	NT24E	1.51	0.00
tblEnergyUse	NT24E	2.72	2.13
tblEnergyUse	NT24NG	1.03	0.00
tblEnergyUse	NT24NG	5.21	9.94
tblEnergyUse	T24E	2.31	0.00
tblEnergyUse	T24E	6.10	5.55
tblEnergyUse	T24NG	11.38	0.00
tblEnergyUse	T24NG	10.65	23.19
tblLandUse	LandUseSquareFeet	376,740.00	376,742.00
tblProjectCharacteristics	CO2IntensityFactor	630.89	503.21
tblProjectCharacteristics	OperationalYear	2014	2024
tblSolidWaste	SolidWasteGenerationRate	11.38	0.00
tblSolidWaste	SolidWasteGenerationRate	489.76	0.00
tblVehicleTrips	ST_TR	6.21	0.00
tblVehicleTrips	ST_TR	11.23	0.00
tblVehicleTrips	SU_TR	5.83	0.00
tblVehicleTrips	SU_TR	1.21	0.00
tblVehicleTrips	WD_TR	79.26	0.00
tblVehicleTrips	WD_TR	27.49	0.00
tblWater	IndoorWaterUseRate	375,283.72	0.00
tblWater	IndoorWaterUseRate	18,478,732.50	0.00
tblWater	OutdoorWaterUseRate	965,015.27	0.00
tblWater	OutdoorWaterUseRate	28,902,632.89	0.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	6.2537	1.8000e-004	0.0203	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.0396	0.0396	1.0000e-004	0.0000	0.0418
Energy	0.0673	0.6118	0.5139	3.6700e-003		0.0465	0.0465		0.0465	0.0465	0.0000	1,703.1243	1,703.1243	0.0725	0.0246	1,712.2661
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.3210**	**0.6120**	**0.5343**	**3.6700e-003**	**0.0000**	**0.0466**	**0.0466**	**0.0000**	**0.0466**	**0.0466**	**0.0000**	**1,703.1638**	**1,703.1638**	**0.0726**	**0.0246**	**1,712.3079**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	6.2537	1.8000e-004	0.0203	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.0396	0.0396	1.0000e-004	0.0000	0.0418
Energy	0.0673	0.6118	0.5139	3.6700e-003		0.0465	0.0465		0.0465	0.0465	0.0000	1,703.1243	1,703.1243	0.0725	0.0246	1,712.2661
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.3210**	**0.6120**	**0.5343**	**3.6700e-003**	**0.0000**	**0.0466**	**0.0466**	**0.0000**	**0.0466**	**0.0466**	**0.0000**	**1,703.1638**	**1,703.1638**	**0.0726**	**0.0246**	**1,712.3079**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Day-Care Center	0.00	0.00	0.00		
Junior College (2Yr)	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Day-Care Center	16.60	8.40	6.90	12.70	82.30	5.00	28	58	14

Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.501871	0.056875	0.196091	0.152579	0.042282	0.006031	0.016253	0.017122	0.001469	0.002194	0.004230	0.000489	0.002515

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,037.0659	1,037.0659	0.0598	0.0124	1,042.1543
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,037.0659	1,037.0659	0.0598	0.0124	1,042.1543
NaturalGas Mitigated	0.0673	0.6118	0.5139	3.6700e-003		0.0465	0.0465		0.0465	0.0465	0.0000	666.0584	666.0584	0.0128	0.0122	670.1119
NaturalGas Unmitigated	0.0673	0.6118	0.5139	3.6700e-003		0.0465	0.0465		0.0465	0.0465	0.0000	666.0584	666.0584	0.0128	0.0122	670.1119

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Land Use	kBTU/yr	tons/yr										MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Day-Care Center	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	1.24815e+007	0.0673	0.6118	0.5139	3.6700e-003		0.0465	0.0465		0.0465	0.0465	0.0000	666.0584	666.0584	0.0128	0.0122	670.1119
Total		**0.0673**	**0.6118**	**0.5139**	**3.6700e-003**		**0.0465**	**0.0465**		**0.0465**	**0.0465**	**0.0000**	**666.0584**	**666.0584**	**0.0128**	**0.0122**	**670.1119**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Day-Care Center	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	1.24815e+007	0.0673	0.6118	0.5139	3.6700e-003		0.0465	0.0465		0.0465	0.0465	0.0000	666.0584	666.0584	0.0128	0.0122	670.1119
Total		**0.0673**	**0.6118**	**0.5139**	**3.6700e-003**		**0.0465**	**0.0465**		**0.0465**	**0.0465**	**0.0000**	**666.0584**	**666.0584**	**0.0128**	**0.0122**	**670.1119**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Day-Care Center	0	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	4.54351e+006	1,037.0659	0.0598	0.0124	1,042.1543

Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**1,037.0659**	**0.0598**	**0.0124**	**1,042.1543**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Day-Care Center	0	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	4.54351e+006	1,037.0659	0.0598	0.0124	1,042.1543
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**1,037.0659**	**0.0598**	**0.0124**	**1,042.1543**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	6.2537	1.8000e-004	0.0203	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.0396	0.0396	1.0000e-004	0.0000	0.0418
Unmitigated	6.2537	1.8000e-004	0.0203	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.0396	0.0396	1.0000e-004	0.0000	0.0418

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4887					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	5.7631					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.8800e-003	1.8000e-004	0.0203	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.0396	0.0396	1.0000e-004	0.0000	0.0418
Total	**6.2537**	**1.8000e-004**	**0.0203**	**0.0000**		**7.0000e-005**	**7.0000e-005**		**7.0000e-005**	**7.0000e-005**	**0.0000**	**0.0396**	**0.0396**	**1.0000e-004**	**0.0000**	**0.0418**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4887					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	5.7631					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.8800e-003	1.8000e-004	0.0203	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	0.0396	0.0396	1.0000e-004	0.0000	0.0418
Total	**6.2537**	**1.8000e-004**	**0.0203**	**0.0000**		**7.0000e-005**	**7.0000e-005**		**7.0000e-005**	**7.0000e-005**	**0.0000**	**0.0396**	**0.0396**	**1.0000e-004**	**0.0000**	**0.0418**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Day-Care Center	0 / 0	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			

Day-Care Center	0 / 0	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Day-Care Center	0	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	0	0.0000	0.0000	0.0000	0.0000

Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Day-Care Center	0	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

2024 Existing Facilities Operation

Orange County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Day-Care Center	8.75	1000sqft	0.20	8,750.00	0
Junior College (2Yr)	376.74	1000sqft	8.65	376,742.00	0
Parking Lot	1,209.38	1000sqft	27.76	1,209,380.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	503.21	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - modified

Land Use - modified

Vehicle Trips - modified

Area Coating - modified

Energy Use - modified

Water And Wastewater - modified

Solid Waste - modified

Table Name	Column Name	Default Value	New Value
tblEnergyUse	LightingElect	3.09	0.00

tblEnergyUse	LightingElect	5.23	4.38
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	NT24E	1.51	0.00
tblEnergyUse	NT24E	2.72	2.13
tblEnergyUse	NT24NG	1.03	0.00
tblEnergyUse	NT24NG	5.21	9.94
tblEnergyUse	T24E	2.31	0.00
tblEnergyUse	T24E	6.10	5.55
tblEnergyUse	T24NG	11.38	0.00
tblEnergyUse	T24NG	10.65	23.19
tblLandUse	LandUseSquareFeet	376,740.00	376,742.00
tblProjectCharacteristics	CO2IntensityFactor	630.89	503.21
tblProjectCharacteristics	OperationalYear	2014	2024
tblSolidWaste	SolidWasteGenerationRate	11.38	0.00
tblSolidWaste	SolidWasteGenerationRate	489.76	0.00
tblVehicleTrips	ST_TR	6.21	0.00
tblVehicleTrips	ST_TR	11.23	0.00
tblVehicleTrips	SU_TR	5.83	0.00
tblVehicleTrips	SU_TR	1.21	0.00
tblVehicleTrips	WD_TR	79.26	0.00
tblVehicleTrips	WD_TR	27.49	0.00
tblWater	IndoorWaterUseRate	375,283.72	0.00
tblWater	IndoorWaterUseRate	18,478,732.50	0.00
tblWater	OutdoorWaterUseRate	965,015.27	0.00
tblWater	OutdoorWaterUseRate	28,902,632.89	0.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	34.2715	1.4800e-003	0.1626	1.0000e-005		5.8000e-004	5.8000e-004		5.8000e-004	5.8000e-004		0.3490	0.3490	9.1000e-004		0.3682
Energy	0.3688	3.3525	2.8161	0.0201		0.2548	0.2548		0.2548	0.2548		4,023.0338	4,023.0338	0.0771	0.0738	4,047.5173
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**34.6402**	**3.3540**	**2.9787**	**0.0201**	**0.0000**	**0.2554**	**0.2554**	**0.0000**	**0.2554**	**0.2554**		**4,023.3829**	**4,023.3829**	**0.0780**	**0.0738**	**4,047.8855**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	34.2715	1.4800e-003	0.1626	1.0000e-005		5.8000e-004	5.8000e-004		5.8000e-004	5.8000e-004		0.3490	0.3490	9.1000e-004		0.3682
Energy	0.3688	3.3525	2.8161	0.0201		0.2548	0.2548		0.2548	0.2548		4,023.0338	4,023.0338	0.0771	0.0738	4,047.5173
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**34.6402**	**3.3540**	**2.9787**	**0.0201**	**0.0000**	**0.2554**	**0.2554**	**0.0000**	**0.2554**	**0.2554**		**4,023.3829**	**4,023.3829**	**0.0780**	**0.0738**	**4,047.8855**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Day-Care Center	0.00	0.00	0.00		
Junior College (2Yr)	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Day-Care Center	16.60	8.40	6.90	12.70	82.30	5.00	28	58	14
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.501871	0.056875	0.196091	0.152579	0.042282	0.006031	0.016253	0.017122	0.001469	0.002194	0.004230	0.000489	0.002515

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.3688	3.3525	2.8161	0.0201		0.2548	0.2548		0.2548	0.2548		4,023.0338	4,023.0338	0.0771	0.0738	4,047.5173
NaturalGas Unmitigated	0.3688	3.3525	2.8161	0.0201		0.2548	0.2548		0.2548	0.2548		4,023.0338	4,023.0338	0.0771	0.0738	4,047.5173

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Junior College (2Yr)	34195.8	0.3688	3.3525	2.8161	0.0201		0.2548	0.2548		0.2548	0.2548		4,023.0338	4,023.0338	0.0771	0.0738	4,047.5173
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Day-Care Center	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.3688**	**3.3525**	**2.8161**	**0.0201**		**0.2548**	**0.2548**		**0.2548**	**0.2548**		**4,023.0338**	**4,023.0338**	**0.0771**	**0.0738**	**4,047.5173**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Day-Care Center	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	34.1958	0.3688	3.3525	2.8161	0.0201		0.2548	0.2548		0.2548	0.2548		4,023.0338	4,023.0338	0.0771	0.0738	4,047.5173
Total		**0.3688**	**3.3525**	**2.8161**	**0.0201**		**0.2548**	**0.2548**		**0.2548**	**0.2548**		**4,023.0338**	**4,023.0338**	**0.0771**	**0.0738**	**4,047.5173**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	34.2715	1.4800e-003	0.1626	1.0000e-005		5.8000e-004	5.8000e-004		5.8000e-004	5.8000e-004		0.3490	0.3490	9.1000e-004		0.3682
Unmitigated	34.2715	1.4800e-003	0.1626	1.0000e-005		5.8000e-004	5.8000e-004		5.8000e-004	5.8000e-004		0.3490	0.3490	9.1000e-004		0.3682

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.6780					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	31.5785					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0150	1.4800e-003	0.1626	1.0000e-005		5.8000e-004	5.8000e-004		5.8000e-004	5.8000e-004		0.3490	0.3490	9.1000e-004		0.3682
Total	**34.2715**	**1.4800e-003**	**0.1626**	**1.0000e-005**		**5.8000e-004**	**5.8000e-004**		**5.8000e-004**	**5.8000e-004**		**0.3490**	**0.3490**	**9.1000e-004**		**0.3682**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.6780					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	31.5785					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0150	1.4800e-003	0.1626	1.0000e-005		5.8000e-004	5.8000e-004		5.8000e-004	5.8000e-004		0.3490	0.3490	9.1000e-004		0.3682
Total	**34.2715**	**1.4800e-003**	**0.1626**	**1.0000e-005**		**5.8000e-004**	**5.8000e-004**		**5.8000e-004**	**5.8000e-004**		**0.3490**	**0.3490**	**9.1000e-004**		**0.3682**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

2024 Existing Facilities Operation

Orange County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Day-Care Center	8.75	1000sqft	0.20	8,750.00	0
Junior College (2Yr)	376.74	1000sqft	8.65	376,742.00	0
Parking Lot	1,209.38	1000sqft	27.76	1,209,380.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	503.21	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - modified

Land Use - modified

Vehicle Trips - modified

Area Coating - modified

Energy Use - modified

Water And Wastewater - modified

Solid Waste - modified

Table Name	Column Name	Default Value	New Value
tblEnergyUse	LightingElect	3.09	0.00

tblEnergyUse	LightingElect	5.23	4.38
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	NT24E	1.51	0.00
tblEnergyUse	NT24E	2.72	2.13
tblEnergyUse	NT24NG	1.03	0.00
tblEnergyUse	NT24NG	5.21	9.94
tblEnergyUse	T24E	2.31	0.00
tblEnergyUse	T24E	6.10	5.55
tblEnergyUse	T24NG	11.38	0.00
tblEnergyUse	T24NG	10.65	23.19
tblLandUse	LandUseSquareFeet	376,740.00	376,742.00
tblProjectCharacteristics	CO2IntensityFactor	630.89	503.21
tblProjectCharacteristics	OperationalYear	2014	2024
tblSolidWaste	SolidWasteGenerationRate	11.38	0.00
tblSolidWaste	SolidWasteGenerationRate	489.76	0.00
tblVehicleTrips	ST_TR	6.21	0.00
tblVehicleTrips	ST_TR	11.23	0.00
tblVehicleTrips	SU_TR	5.83	0.00
tblVehicleTrips	SU_TR	1.21	0.00
tblVehicleTrips	WD_TR	79.26	0.00
tblVehicleTrips	WD_TR	27.49	0.00
tblWater	IndoorWaterUseRate	375,283.72	0.00
tblWater	IndoorWaterUseRate	18,478,732.50	0.00
tblWater	OutdoorWaterUseRate	965,015.27	0.00
tblWater	OutdoorWaterUseRate	28,902,632.89	0.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	34.2715	1.4800e-003	0.1626	1.0000e-005		5.8000e-004	5.8000e-004		5.8000e-004	5.8000e-004		0.3490	0.3490	9.1000e-004		0.3682
Energy	0.3688	3.3525	2.8161	0.0201		0.2548	0.2548		0.2548	0.2548		4,023.0338	4,023.0338	0.0771	0.0738	4,047.5173
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**34.6402**	**3.3540**	**2.9787**	**0.0201**	**0.0000**	**0.2554**	**0.2554**	**0.0000**	**0.2554**	**0.2554**		**4,023.3829**	**4,023.3829**	**0.0780**	**0.0738**	**4,047.8855**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	34.2715	1.4800e-003	0.1626	1.0000e-005		5.8000e-004	5.8000e-004		5.8000e-004	5.8000e-004		0.3490	0.3490	9.1000e-004		0.3682
Energy	0.3688	3.3525	2.8161	0.0201		0.2548	0.2548		0.2548	0.2548		4,023.0338	4,023.0338	0.0771	0.0738	4,047.5173
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**34.6402**	**3.3540**	**2.9787**	**0.0201**	**0.0000**	**0.2554**	**0.2554**	**0.0000**	**0.2554**	**0.2554**		**4,023.3829**	**4,023.3829**	**0.0780**	**0.0738**	**4,047.8855**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Day-Care Center	0.00	0.00	0.00		
Junior College (2Yr)	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Day-Care Center	16.60	8.40	6.90	12.70	82.30	5.00	28	58	14
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.501871	0.056875	0.196091	0.152579	0.042282	0.006031	0.016253	0.017122	0.001469	0.002194	0.004230	0.000489	0.002515

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.3688	3.3525	2.8161	0.0201		0.2548	0.2548		0.2548	0.2548		4,023.0338	4,023.0338	0.0771	0.0738	4,047.5173
NaturalGas Unmitigated	0.3688	3.3525	2.8161	0.0201		0.2548	0.2548		0.2548	0.2548		4,023.0338	4,023.0338	0.0771	0.0738	4,047.5173

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Junior College (2Yr)	34195.8	0.3688	3.3525	2.8161	0.0201		0.2548	0.2548		0.2548	0.2548		4,023.0338	4,023.0338	0.0771	0.0738	4,047.5173
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Day-Care Center	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.3688**	**3.3525**	**2.8161**	**0.0201**		**0.2548**	**0.2548**		**0.2548**	**0.2548**		**4,023.0338**	**4,023.0338**	**0.0771**	**0.0738**	**4,047.5173**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Day-Care Center	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	34.1958	0.3688	3.3525	2.8161	0.0201		0.2548	0.2548		0.2548	0.2548		4,023.0338	4,023.0338	0.0771	0.0738	4,047.5173
Total		**0.3688**	**3.3525**	**2.8161**	**0.0201**		**0.2548**	**0.2548**		**0.2548**	**0.2548**		**4,023.0338**	**4,023.0338**	**0.0771**	**0.0738**	**4,047.5173**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	34.2715	1.4800e-003	0.1626	1.0000e-005		5.8000e-004	5.8000e-004		5.8000e-004	5.8000e-004		0.3490	0.3490	9.1000e-004		0.3682
Unmitigated	34.2715	1.4800e-003	0.1626	1.0000e-005		5.8000e-004	5.8000e-004		5.8000e-004	5.8000e-004		0.3490	0.3490	9.1000e-004		0.3682

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.6780					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	31.5785					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0150	1.4800e-003	0.1626	1.0000e-005		5.8000e-004	5.8000e-004		5.8000e-004	5.8000e-004		0.3490	0.3490	9.1000e-004		0.3682
Total	**34.2715**	**1.4800e-003**	**0.1626**	**1.0000e-005**		**5.8000e-004**	**5.8000e-004**		**5.8000e-004**	**5.8000e-004**		**0.3490**	**0.3490**	**9.1000e-004**		**0.3682**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.6780					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	31.5785					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0150	1.4800e-003	0.1626	1.0000e-005		5.8000e-004	5.8000e-004		5.8000e-004	5.8000e-004		0.3490	0.3490	9.1000e-004		0.3682
Total	**34.2715**	**1.4800e-003**	**0.1626**	**1.0000e-005**		**5.8000e-004**	**5.8000e-004**		**5.8000e-004**	**5.8000e-004**		**0.3490**	**0.3490**	**9.1000e-004**		**0.3682**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

2024 Operation - New Facilities

Orange County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Day-Care Center	24.78	1000sqft	0.57	24,784.00	0
Junior College (2Yr)	451.22	1000sqft	10.36	451,218.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	503.21	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - modified

Land Use - modified

Vehicle Trips - modified

Area Coating - modified

Water And Wastewater - modified

Solid Waste - modified

Energy Mitigation -

Energy Use - modified

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	24,780.00	24,784.00

tblLandUse	LandUseSquareFeet	451,220.00	451,218.00
tblProjectCharacteristics	CO2IntensityFactor	630.89	503.21
tblProjectCharacteristics	OperationalYear	2014	2024
tblSolidWaste	SolidWasteGenerationRate	32.21	0.00
tblSolidWaste	SolidWasteGenerationRate	586.59	144.00
tblVehicleTrips	ST_TR	6.21	0.00
tblVehicleTrips	ST_TR	11.23	16.49
tblVehicleTrips	SU_TR	5.83	0.00
tblVehicleTrips	SU_TR	1.21	1.78
tblVehicleTrips	WD_TR	79.26	0.00
tblVehicleTrips	WD_TR	27.49	40.37
tblWater	IndoorWaterUseRate	1,062,803.48	0.00
tblWater	IndoorWaterUseRate	22,131,904.44	23,683,210.73
tblWater	OutdoorWaterUseRate	2,732,923.24	0.00
tblWater	OutdoorWaterUseRate	34,616,568.49	37,042,970.27

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.2722	6.0000e-005	6.0700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0118	0.0118	3.0000e-005	0.0000	0.0125
Energy	0.0403	0.3659	0.3073	2.2000e-003		0.0278	0.0278		0.0278	0.0278	0.0000	1,884.4220	1,884.4220	0.0933	0.0250	1,894.1377
Mobile	5.5848	11.2652	58.4382	0.2256	16.1981	0.2323	16.4304	4.3292	0.2146	4.5437	0.0000	14,920.4957	14,920.4957	0.4876	0.0000	14,930.7360

Waste						0.0000	0.0000		0.0000	0.0000	29.2307	0.0000	29.2307	1.7275	0.0000	65.5079
Water						0.0000	0.0000		0.0000	0.0000	7.5136	164.3248	171.8384	0.7812	0.0202	194.4995
Total	**7.8973**	**11.6312**	**58.7516**	**0.2278**	**16.1981**	**0.2601**	**16.4582**	**4.3292**	**0.2424**	**4.5716**	**36.7443**	**16,969.2544**	**17,005.9987**	**3.0896**	**0.0452**	**17,084.8936**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.2722	6.0000e-005	6.0700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0118	0.0118	3.0000e-005	0.0000	0.0125
Energy	0.0403	0.3659	0.3073	2.2000e-003		0.0278	0.0278		0.0278	0.0278	0.0000	1,837.3738	1,837.3738	0.0906	0.0245	1,846.8586
Mobile	5.5848	11.2652	58.4382	0.2256	16.1981	0.2323	16.4304	4.3292	0.2146	4.5437	0.0000	14,920.4957	14,920.4957	0.4876	0.0000	14,930.7360
Waste						0.0000	0.0000		0.0000	0.0000	29.2307	0.0000	29.2307	1.7275	0.0000	65.5079
Water						0.0000	0.0000		0.0000	0.0000	7.5136	164.3248	171.8384	0.7811	0.0202	194.4876
Total	**7.8973**	**11.6312**	**58.7516**	**0.2278**	**16.1981**	**0.2601**	**16.4582**	**4.3292**	**0.2424**	**4.5716**	**36.7443**	**16,922.2061**	**16,958.9504**	**3.0868**	**0.0446**	**17,037.6025**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.28**	**0.28**	**0.09**	**1.31**	**0.28**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	5.5848	11.2652	58.4382	0.2256	16.1981	0.2323	16.4304	4.3292	0.2146	4.5437	0.0000	14,920.4957	14,920.4957	0.4876	0.0000	14,930.7360
Unmitigated	5.5848	11.2652	58.4382	0.2256	16.1981	0.2323	16.4304	4.3292	0.2146	4.5437	0.0000	14,920.4957	14,920.4957	0.4876	0.0000	14,930.7360

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Day-Care Center	0.00	0.00	0.00		
Junior College (2Yr)	18,215.75	7,440.62	803.17	42,855,667	42,855,667
Total	18,215.75	7,440.62	803.17	42,855,667	42,855,667

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Day-Care Center	16.60	8.40	6.90	12.70	82.30	5.00	28	58	14
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.501871	0.056875	0.196091	0.152579	0.042282	0.006031	0.016253	0.017122	0.001469	0.002194	0.004230	0.000489	0.002515

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,439.0723	1,439.0723	0.0829	0.0172	1,446.1331
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,486.1206	1,486.1206	0.0857	0.0177	1,493.4122
NaturalGas Mitigated	0.0403	0.3659	0.3073	2.2000e-003		0.0278	0.0278		0.0278	0.0278	0.0000	398.3014	398.3014	7.6300e-003	7.3000e-003	400.7254
NaturalGas Unmitigated	0.0403	0.3659	0.3073	2.2000e-003		0.0278	0.0278		0.0278	0.0278	0.0000	398.3014	398.3014	7.6300e-003	7.3000e-003	400.7254

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Day-Care Center	307569	1.6600e-003	0.0151	0.0127	9.0000e-005		1.1500e-003	1.1500e-003		1.1500e-003	1.1500e-003	0.0000	16.4131	16.4131	3.1000e-004	3.0000e-004	16.5130
Junior College (2Yr)	7.15632e+006	0.0386	0.3508	0.2947	2.1000e-003		0.0267	0.0267		0.0267	0.0267	0.0000	381.8884	381.8884	7.3200e-003	7.0000e-003	384.2125
Total		**0.0403**	**0.3659**	**0.3073**	**2.1900e-003**		**0.0278**	**0.0278**		**0.0278**	**0.0278**	**0.0000**	**398.3014**	**398.3014**	**7.6300e-003**	**7.3000e-003**	**400.7254**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Junior College (2Yr)	7.15632e+006	0.0386	0.3508	0.2947	2.1000e-003		0.0267	0.0267		0.0267	0.0267	0.0000	381.8884	381.8884	7.3200e-003	7.0000e-003	384.2125
Day-Care Center	307569	1.6600e-003	0.0151	0.0127	9.0000e-005		1.1500e-003	1.1500e-003		1.1500e-003	1.1500e-003	0.0000	16.4131	16.4131	3.1000e-004	3.0000e-004	16.5130
Total		**0.0403**	**0.3659**	**0.3073**	**2.1900e-003**		**0.0278**	**0.0278**		**0.0278**	**0.0278**	**0.0000**	**398.3014**	**398.3014**	**7.6300e-003**	**7.3000e-003**	**400.7254**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Day-Care Center	171257	39.0899	2.2500e-003	4.7000e-004	39.2817
Junior College (2Yr)	6.33961e+006	1,447.0307	0.0834	0.0173	1,454.1306
Total		**1,486.1206**	**0.0856**	**0.0177**	**1,493.4122**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Day-Care Center	68195.4	15.5658	9.0000e-004	1.9000e-004	15.6421
Junior College (2Yr)	6.23655e+006	1,423.5066	0.0820	0.0170	1,430.4910

Total		**1,439.0723**	**0.0829**	**0.0172**	**1,446.1331**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	2.2722	6.0000e-005	6.0700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0118	0.0118	3.0000e-005	0.0000	0.0125
Unmitigated	2.2722	6.0000e-005	6.0700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0118	0.0118	3.0000e-005	0.0000	0.0125

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.5516					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.7200					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.6000e-004	6.0000e-005	6.0700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0118	0.0118	3.0000e-005	0.0000	0.0125
Total	**2.2722**	**6.0000e-005**	**6.0700e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0118**	**0.0118**	**3.0000e-005**	**0.0000**	**0.0125**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.5516					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.7200					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.6000e-004	6.0000e-005	6.0700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0118	0.0118	3.0000e-005	0.0000	0.0125
Total	**2.2722**	**6.0000e-005**	**6.0700e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0118**	**0.0118**	**3.0000e-005**	**0.0000**	**0.0125**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	171.8384	0.7811	0.0202	194.4876
Unmitigated	171.8384	0.7812	0.0202	194.4995

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e

Land Use	Mgal	MT/yr			
Day-Care Center	0 / 0	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	23.6832 / 37.043	171.8384	0.7812	0.0202	194.4995
Total		**171.8384**	**0.7812**	**0.0202**	**194.4995**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Day-Care Center	0 / 0	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	23.6832 / 37.043	171.8384	0.7811	0.0202	194.4876
Total		**171.8384**	**0.7811**	**0.0202**	**194.4876**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	29.2307	1.7275	0.0000	65.5079

Unmitigated	29.2307	1.7275	0.0000	65.5079

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Day-Care Center	0	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	144	29.2307	1.7275	0.0000	65.5079
Total		**29.2307**	**1.7275**	**0.0000**	**65.5079**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Day-Care Center	0	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	144	29.2307	1.7275	0.0000	65.5079
Total		**29.2307**	**1.7275**	**0.0000**	**65.5079**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

2024 Operation - New Facilities

Orange County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Day-Care Center	24.78	1000sqft	0.57	24,784.00	0
Junior College (2Yr)	451.22	1000sqft	10.36	451,218.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	503.21	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - modified

Land Use - modified

Vehicle Trips - modified

Area Coating - modified

Water And Wastewater - modified

Solid Waste - modified

Energy Mitigation -

Energy Use - modified

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	24,780.00	24,784.00

tblLandUse	LandUseSquareFeet	451,220.00	451,218.00
tblProjectCharacteristics	CO2IntensityFactor	630.89	503.21
tblProjectCharacteristics	OperationalYear	2014	2024
tblSolidWaste	SolidWasteGenerationRate	32.21	0.00
tblSolidWaste	SolidWasteGenerationRate	586.59	144.00
tblVehicleTrips	ST_TR	6.21	0.00
tblVehicleTrips	ST_TR	11.23	16.49
tblVehicleTrips	SU_TR	5.83	0.00
tblVehicleTrips	SU_TR	1.21	1.78
tblVehicleTrips	WD_TR	79.26	0.00
tblVehicleTrips	WD_TR	27.49	40.37
tblWater	IndoorWaterUseRate	1,062,803.48	0.00
tblWater	IndoorWaterUseRate	22,131,904.44	23,683,210.73
tblWater	OutdoorWaterUseRate	2,732,923.24	0.00
tblWater	OutdoorWaterUseRate	34,616,568.49	37,042,970.27

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	12.4516	4.4000e-004	0.0485	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.1042	0.1042	2.7000e-004		0.1099
Energy	0.2205	2.0048	1.6840	0.0120		0.1524	0.1524		0.1524	0.1524		2,405.7653	2,405.7653	0.0461	0.0441	2,420.4064
Mobile	39.6533	73.7869	412.0509	1.6468	116.3118	1.6386	117.9504	31.0413	1.5136	32.5548		119,842.2600	119,842.2600	3.7946		119,921.9468

Total	**52.3254**	**75.7922**	**413.7834**	**1.6588**	**116.3118**	**1.7912**	**118.1029**	**31.0413**	**1.6661**	**32.7074**		**122,248.1295**	**122,248.1295**	**3.8410**	**0.0441**	**122,342.4631**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	12.4516	4.4000e-004	0.0485	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.1042	0.1042	2.7000e-004		0.1099
Energy	0.2205	2.0048	1.6840	0.0120		0.1524	0.1524		0.1524	0.1524		2,405.7653	2,405.7653	0.0461	0.0441	2,420.4064
Mobile	39.6533	73.7869	412.0509	1.6468	116.3118	1.6386	117.9504	31.0413	1.5136	32.5548		119,842.2600	119,842.2600	3.7946		119,921.9468
Total	**52.3254**	**75.7922**	**413.7834**	**1.6588**	**116.3118**	**1.7912**	**118.1029**	**31.0413**	**1.6661**	**32.7074**		**122,248.1295**	**122,248.1295**	**3.8410**	**0.0441**	**122,342.4631**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Mitigated	39.6533	73.7869	412.0509	1.6468	116.3118	1.6386	117.9504	31.0413	1.5136	32.5548		119,842.2600	119,842.2600	3.7946		119,921.9468
Unmitigated	39.6533	73.7869	412.0509	1.6468	116.3118	1.6386	117.9504	31.0413	1.5136	32.5548		119,842.2600	119,842.2600	3.7946		119,921.9468

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Day-Care Center	0.00	0.00	0.00		
Junior College (2Yr)	18,215.75	7,440.62	803.17	42,855,667	42,855,667
Total	18,215.75	7,440.62	803.17	42,855,667	42,855,667

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Day-Care Center	16.60	8.40	6.90	12.70	82.30	5.00	28	58	14
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.501871	0.056875	0.196091	0.152579	0.042282	0.006031	0.016253	0.017122	0.001469	0.002194	0.004230	0.000489	0.002515

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day				
NaturalGas Mitigated	0.2205	2.0048	1.6840	0.0120		0.1524	0.1524		0.1524	0.1524		2,405.7653	2,405.7653	0.0461	0.0441	2,420.4064
NaturalGas Unmitigated	0.2205	2.0048	1.6840	0.0120		0.1524	0.1524		0.1524	0.1524		2,405.7653	2,405.7653	0.0461	0.0441	2,420.4064

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Day-Care Center	842.656	9.0900e-003	0.0826	0.0694	5.0000e-004		6.2800e-003	6.2800e-003		6.2800e-003	6.2800e-003		99.1360	99.1360	1.9000e-003	1.8200e-003	99.7393
Junior College (2Yr)	19606.3	0.2114	1.9222	1.6146	0.0115		0.1461	0.1461		0.1461	0.1461		2,306.6293	2,306.6293	0.0442	0.0423	2,320.6671
Total		**0.2205**	**2.0048**	**1.6840**	**0.0120**		**0.1524**	**0.1524**		**0.1524**	**0.1524**		**2,405.7653**	**2,405.7653**	**0.0461**	**0.0441**	**2,420.4064**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Junior College (2Yr)	19.6063	0.2114	1.9222	1.6146	0.0115		0.1461	0.1461		0.1461	0.1461		2,306.6293	2,306.6293	0.0442	0.0423	2,320.6671
Day-Care Center	0.842656	9.0900e-003	0.0826	0.0694	5.0000e-004		6.2800e-003	6.2800e-003		6.2800e-003	6.2800e-003		99.1360	99.1360	1.9000e-003	1.8200e-003	99.7393
Total		**0.2205**	**2.0048**	**1.6840**	**0.0120**		**0.1524**	**0.1524**		**0.1524**	**0.1524**		**2,405.7653**	**2,405.7653**	**0.0461**	**0.0441**	**2,420.4064**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	12.4516	4.4000e-004	0.0485	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.1042	0.1042	2.7000e-004		0.1099
Unmitigated	12.4516	4.4000e-004	0.0485	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.1042	0.1042	2.7000e-004		0.1099

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.0223					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	9.4248					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.4800e-003	4.4000e-004	0.0485	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.1042	0.1042	2.7000e-004		0.1099
Total	**12.4516**	**4.4000e-004**	**0.0485**	**0.0000**		**1.7000e-004**	**1.7000e-004**		**1.7000e-004**	**1.7000e-004**		**0.1042**	**0.1042**	**2.7000e-004**		**0.1099**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.0223					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	9.4248					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.4800e-003	4.4000e-004	0.0485	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.1042	0.1042	2.7000e-004		0.1099
Total	**12.4516**	**4.4000e-004**	**0.0485**	**0.0000**		**1.7000e-004**	**1.7000e-004**		**1.7000e-004**	**1.7000e-004**		**0.1042**	**0.1042**	**2.7000e-004**		**0.1099**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

2024 Operation - New Facilities

Orange County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Day-Care Center	24.78	1000sqft	0.57	24,784.00	0
Junior College (2Yr)	451.22	1000sqft	10.36	451,218.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	503.21	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - modified

Land Use - modified

Vehicle Trips - modified

Area Coating - modified

Water And Wastewater - modified

Solid Waste - modified

Energy Mitigation -

Energy Use - modified

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	24,780.00	24,784.00

tblLandUse	LandUseSquareFeet	451,220.00	451,218.00
tblProjectCharacteristics	CO2IntensityFactor	630.89	503.21
tblProjectCharacteristics	OperationalYear	2014	2024
tblSolidWaste	SolidWasteGenerationRate	32.21	0.00
tblSolidWaste	SolidWasteGenerationRate	586.59	144.00
tblVehicleTrips	ST_TR	6.21	0.00
tblVehicleTrips	ST_TR	11.23	16.49
tblVehicleTrips	SU_TR	5.83	0.00
tblVehicleTrips	SU_TR	1.21	1.78
tblVehicleTrips	WD_TR	79.26	0.00
tblVehicleTrips	WD_TR	27.49	40.37
tblWater	IndoorWaterUseRate	1,062,803.48	0.00
tblWater	IndoorWaterUseRate	22,131,904.44	23,683,210.73
tblWater	OutdoorWaterUseRate	2,732,923.24	0.00
tblWater	OutdoorWaterUseRate	34,616,568.49	37,042,970.27

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	12.4516	4.4000e-004	0.0485	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.1042	0.1042	2.7000e-004		0.1099
Energy	0.2205	2.0048	1.6840	0.0120		0.1524	0.1524		0.1524	0.1524		2,405.7653	2,405.7653	0.0461	0.0441	2,420.4064
Mobile	41.8022	77.9351	410.4437	1.5728	116.3118	1.6431	117.9549	31.0413	1.5177	32.5590		114,744.3319	114,744.3319	3.7982		114,824.0947

Total	**54.4744**	**79.9404**	**412.1762**	**1.5848**	**116.3118**	**1.7957**	**118.1074**	**31.0413**	**1.6703**	**32.7115**		**117,150.2014**	**117,150.2014**	**3.8446**	**0.0441**	**117,244.6110**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	12.4516	4.4000e-004	0.0485	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.1042	0.1042	2.7000e-004		0.1099
Energy	0.2205	2.0048	1.6840	0.0120		0.1524	0.1524		0.1524	0.1524		2,405.7653	2,405.7653	0.0461	0.0441	2,420.4064
Mobile	41.8022	77.9351	410.4437	1.5728	116.3118	1.6431	117.9549	31.0413	1.5177	32.5590		114,744.3319	114,744.3319	3.7982		114,824.0947
Total	**54.4744**	**79.9404**	**412.1762**	**1.5848**	**116.3118**	**1.7957**	**118.1074**	**31.0413**	**1.6703**	**32.7115**		**117,150.2014**	**117,150.2014**	**3.8446**	**0.0441**	**117,244.6110**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Mitigated	41.8022	77.9351	410.4437	1.5728	116.3118	1.6431	117.9549	31.0413	1.5177	32.5590		114,744.3319	114,744.3319	3.7982		114,824.0947
Unmitigated	41.8022	77.9351	410.4437	1.5728	116.3118	1.6431	117.9549	31.0413	1.5177	32.5590		114,744.3319	114,744.3319	3.7982		114,824.0947

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Day-Care Center	0.00	0.00	0.00		
Junior College (2Yr)	18,215.75	7,440.62	803.17	42,855,667	42,855,667
Total	18,215.75	7,440.62	803.17	42,855,667	42,855,667

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Day-Care Center	16.60	8.40	6.90	12.70	82.30	5.00	28	58	14
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.501871	0.056875	0.196091	0.152579	0.042282	0.006031	0.016253	0.017122	0.001469	0.002194	0.004230	0.000489	0.002515

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day				
NaturalGas Mitigated	0.2205	2.0048	1.6840	0.0120		0.1524	0.1524		0.1524	0.1524		2,405.7653	2,405.7653	0.0461	0.0441	2,420.4064
NaturalGas Unmitigated	0.2205	2.0048	1.6840	0.0120		0.1524	0.1524		0.1524	0.1524		2,405.7653	2,405.7653	0.0461	0.0441	2,420.4064

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Day-Care Center	842.656	9.0900e-003	0.0826	0.0694	5.0000e-004		6.2800e-003	6.2800e-003		6.2800e-003	6.2800e-003		99.1360	99.1360	1.9000e-003	1.8200e-003	99.7393
Junior College (2Yr)	19606.3	0.2114	1.9222	1.6146	0.0115		0.1461	0.1461		0.1461	0.1461		2,306.6293	2,306.6293	0.0442	0.0423	2,320.6671
Total		**0.2205**	**2.0048**	**1.6840**	**0.0120**		**0.1524**	**0.1524**		**0.1524**	**0.1524**		**2,405.7653**	**2,405.7653**	**0.0461**	**0.0441**	**2,420.4064**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Junior College (2Yr)	19.6063	0.2114	1.9222	1.6146	0.0115		0.1461	0.1461		0.1461	0.1461		2,306.6293	2,306.6293	0.0442	0.0423	2,320.6671
Day-Care Center	0.842656	9.0900e-003	0.0826	0.0694	5.0000e-004		6.2800e-003	6.2800e-003		6.2800e-003	6.2800e-003		99.1360	99.1360	1.9000e-003	1.8200e-003	99.7393
Total		**0.2205**	**2.0048**	**1.6840**	**0.0120**		**0.1524**	**0.1524**		**0.1524**	**0.1524**		**2,405.7653**	**2,405.7653**	**0.0461**	**0.0441**	**2,420.4064**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	12.4516	4.4000e-004	0.0485	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.1042	0.1042	2.7000e-004		0.1099
Unmitigated	12.4516	4.4000e-004	0.0485	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.1042	0.1042	2.7000e-004		0.1099

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.0223					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	9.4248					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.4800e-003	4.4000e-004	0.0485	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.1042	0.1042	2.7000e-004		0.1099
Total	**12.4516**	**4.4000e-004**	**0.0485**	**0.0000**		**1.7000e-004**	**1.7000e-004**		**1.7000e-004**	**1.7000e-004**		**0.1042**	**0.1042**	**2.7000e-004**		**0.1099**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.0223					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	9.4248					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.4800e-003	4.4000e-004	0.0485	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.1042	0.1042	2.7000e-004		0.1099
Total	**12.4516**	**4.4000e-004**	**0.0485**	**0.0000**		**1.7000e-004**	**1.7000e-004**		**1.7000e-004**	**1.7000e-004**		**0.1042**	**0.1042**	**2.7000e-004**		**0.1099**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

BUSINESS AS USUAL CALCULATIONS

Annual, Summer, and Winter Emissions

2024 BAU

Orange County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Day-Care Center	33.53	1000sqft	0.77	33,534.00	0
Junior College (2Yr)	827.96	1000sqft	19.01	827,960.00	0
Parking Lot	1,209.38	1000sqft	27.76	1,209,380.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	30
Climate Zone	8			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - modified

Land Use - modified

Vehicle Trips - modified

Vechicle Emission Factors - modified per CalEEMod Appendix D Non-Pavley Emission Factors

Vechicle Emission Factors - modified

Vechicle Emission Factors - modified

Area Coating - modified

Energy Use - modified

Water And Wastewater - modified

Solid Waste - modified

Energy Mitigation -

Table Name	Column Name	Default Value	New Value
tblEnergyUse	LightingElect	3.09	0.00
tblEnergyUse	LightingElect	5.23	4.38
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	NT24E	1.51	0.00
tblEnergyUse	NT24E	2.72	2.13
tblEnergyUse	NT24NG	1.03	0.00
tblEnergyUse	NT24NG	5.21	9.94
tblEnergyUse	T24E	2.31	0.00
tblEnergyUse	T24E	6.10	5.56
tblEnergyUse	T24NG	11.38	0.00
tblEnergyUse	T24NG	10.65	23.19
tblLandUse	LandUseSquareFeet	33,530.00	33,534.00
tblProjectCharacteristics	OperationalYear	2014	2024
tblSolidWaste	SolidWasteGenerationRate	43.59	0.00
tblSolidWaste	SolidWasteGenerationRate	1,076.35	144.00
tblVehicleEF	LDA	223.83	361.75
tblVehicleEF	LDA	48.65	73.90
tblVehicleEF	LDA	233.25	380.85
tblVehicleEF	LDA	48.65	73.90
tblVehicleEF	LDA	220.36	355.90
tblVehicleEF	LDA	48.65	73.90
tblVehicleEF	LDT1	276.78	416.75
tblVehicleEF	LDT1	60.22	85.17
tblVehicleEF	LDT1	287.84	438.35
tblVehicleEF	LDT1	60.22	85.17
tblVehicleEF	LDT1	272.69	410.41
tblVehicleEF	LDT1	60.22	85.17

tblVehicleEF	LDT2	341.17	490.99
tblVehicleEF	LDT2	73.59	100.77
tblVehicleEF	LDT2	355.13	516.31
tblVehicleEF	LDT2	73.59	100.77
tblVehicleEF	LDT2	336.01	483.33
tblVehicleEF	LDT2	73.59	100.77
tblVehicleEF	MDV	459.38	624.15
tblVehicleEF	MDV	98.86	128.02
tblVehicleEF	MDV	477.98	657.27
tblVehicleEF	MDV	98.86	128.02
tblVehicleEF	MDV	452.52	614.52
tblVehicleEF	MDV	98.86	128.02
tblVehicleTrips	ST_TR	6.21	0.00
tblVehicleTrips	ST_TR	11.23	8.99
tblVehicleTrips	SU_TR	5.83	0.00
tblVehicleTrips	SU_TR	1.21	0.97
tblVehicleTrips	WD_TR	79.26	0.00
tblVehicleTrips	WD_TR	27.49	22.00
tblWater	IndoorWaterUseRate	1,438,087.20	0.00
tblWater	IndoorWaterUseRate	40,610,636.95	23,683,210.73
tblWater	OutdoorWaterUseRate	3,697,938.51	0.00
tblWater	OutdoorWaterUseRate	63,519,201.38	37,042,970.27

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	8.5258	2.4000e-004	0.0264	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.0514	0.0514	1.3000e-004	0.0000	0.0542
Energy	0.1479	1.3446	1.1295	8.0700e-003		0.1022	0.1022		0.1022	0.1022	0.0000	4,323.5884	4,323.5884	0.1595	0.0540	4,343.6886
Mobile	5.5848	11.2652	58.4380	0.2256	16.1980	0.2323	16.4303	4.3292	0.2146	4.5437	0.0000	20,680.7633	20,680.7633	0.4876	0.0000	20,691.0036
Waste						0.0000	0.0000		0.0000	0.0000	29.2307	0.0000	29.2307	1.7275	0.0000	65.5079
Water						0.0000	0.0000		0.0000	0.0000	7.5136	206.0191	213.5327	0.7812	0.0202	236.1938
Total	**14.2586**	**12.6100**	**59.5938**	**0.2337**	**16.1980**	**0.3346**	**16.5326**	**4.3292**	**0.3168**	**4.6460**	**36.7443**	**25,210.4222**	**25,247.1665**	**3.1559**	**0.0742**	**25,336.4481**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	8.5258	2.4000e-004	0.0264	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.0514	0.0514	1.3000e-004	0.0000	0.0542
Energy	0.1479	1.3446	1.1295	8.0700e-003		0.1022	0.1022		0.1022	0.1022	0.0000	4,323.5884	4,323.5884	0.1595	0.0540	4,343.6886
Mobile	5.5848	11.2652	58.4380	0.2256	16.1980	0.2323	16.4303	4.3292	0.2146	4.5437	0.0000	20,680.7633	20,680.7633	0.4876	0.0000	20,691.0036
Waste						0.0000	0.0000		0.0000	0.0000	29.2307	0.0000	29.2307	1.7275	0.0000	65.5079
Water						0.0000	0.0000		0.0000	0.0000	7.5136	206.0191	213.5327	0.7811	0.0202	236.1819
Total	**14.2586**	**12.6100**	**59.5938**	**0.2337**	**16.1980**	**0.3346**	**16.5326**	**4.3292**	**0.3168**	**4.6460**	**36.7443**	**25,210.4222**	**25,247.1665**	**3.1558**	**0.0742**	**25,336.4361**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e

Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.04**	**0.00**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	5.5848	11.2652	58.4380	0.2256	16.1980	0.2323	16.4303	4.3292	0.2146	4.5437	0.0000	20,680.7633	20,680.7633	0.4876	0.0000	20,691.0036
Unmitigated	5.5848	11.2652	58.4380	0.2256	16.1980	0.2323	16.4303	4.3292	0.2146	4.5437	0.0000	20,680.7633	20,680.7633	0.4876	0.0000	20,691.0036

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Day-Care Center	0.00	0.00	0.00		
Junior College (2Yr)	18,215.12	7,443.36	803.12	42,855,467	42,855,467
Parking Lot	0.00	0.00	0.00		
Total	18,215.12	7,443.36	803.12	42,855,467	42,855,467

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Day-Care Center	16.60	8.40	6.90	12.70	82.30	5.00	28	58	14
Junior College (2Yr)	16.60	8.40	6.90	6.40	88.60	5.00	92	7	1
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.501871	0.056875	0.196091	0.152579	0.042282	0.006031	0.016253	0.017122	0.001469	0.002194	0.004230	0.000489	0.002515

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,859.8023	2,859.8023	0.1315	0.0272	2,870.9942
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,859.8023	2,859.8023	0.1315	0.0272	2,870.9942
NaturalGas Mitigated	0.1479	1.3446	1.1295	8.0700e-003		0.1022	0.1022		0.1022	0.1022	0.0000	1,463.7861	1,463.7861	0.0281	0.0268	1,472.6944
NaturalGas Unmitigated	0.1479	1.3446	1.1295	8.0700e-003		0.1022	0.1022		0.1022	0.1022	0.0000	1,463.7861	1,463.7861	0.0281	0.0268	1,472.6944

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					

Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Day-Care Center	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	2.74303e+007	0.1479	1.3446	1.1295	8.0700e-003		0.1022	0.1022		0.1022	0.1022	0.0000	1,463.7861	1,463.7861	0.0281	0.0268	1,472.6944
Total		**0.1479**	**1.3446**	**1.1295**	**8.0700e-003**		**0.1022**	**0.1022**		**0.1022**	**0.1022**	**0.0000**	**1,463.7861**	**1,463.7861**	**0.0281**	**0.0268**	**1,472.6944**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Day-Care Center	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	2.74303e+007	0.1479	1.3446	1.1295	8.0700e-003		0.1022	0.1022		0.1022	0.1022	0.0000	1,463.7861	1,463.7861	0.0281	0.0268	1,472.6944
Total		**0.1479**	**1.3446**	**1.1295**	**8.0700e-003**		**0.1022**	**0.1022**		**0.1022**	**0.1022**	**0.0000**	**1,463.7861**	**1,463.7861**	**0.0281**	**0.0268**	**1,472.6944**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Day-Care Center	0	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	9.99348e+006	2,859.8023	0.1315	0.0272	2,870.9942
Parking Lot	0	0.0000	0.0000	0.0000	0.0000

Total		**2,859.8023**	**0.1315**	**0.0272**	**2,870.9942**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Day-Care Center	0	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	9.99348e+006	2,859.8023	0.1315	0.0272	2,870.9942
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**2,859.8023**	**0.1315**	**0.0272**	**2,870.9942**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	8.5258	2.4000e-004	0.0264	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.0514	0.0514	1.3000e-004	0.0000	0.0542
Unmitigated	8.5258	2.4000e-004	0.0264	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.0514	0.0514	1.3000e-004	0.0000	0.0542

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.0403					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.4831					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.4400e-003	2.4000e-004	0.0264	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.0514	0.0514	1.3000e-004	0.0000	0.0542
Total	**8.5258**	**2.4000e-004**	**0.0264**	**0.0000**		**9.0000e-005**	**9.0000e-005**		**9.0000e-005**	**9.0000e-005**	**0.0000**	**0.0514**	**0.0514**	**1.3000e-004**	**0.0000**	**0.0542**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.0403					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.4831					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.4400e-003	2.4000e-004	0.0264	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.0514	0.0514	1.3000e-004	0.0000	0.0542
Total	**8.5258**	**2.4000e-004**	**0.0264**	**0.0000**		**9.0000e-005**	**9.0000e-005**		**9.0000e-005**	**9.0000e-005**	**0.0000**	**0.0514**	**0.0514**	**1.3000e-004**	**0.0000**	**0.0542**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	213.5327	0.7811	0.0202	236.1819
Unmitigated	213.5327	0.7812	0.0202	236.1938

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Day-Care Center	0 / 0	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	23.6832 / 37.043	213.5327	0.7812	0.0202	236.1938
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**213.5327**	**0.7812**	**0.0202**	**236.1938**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Day-Care Center	0 / 0	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	23.6832 / 37.043	213.5327	0.7811	0.0202	236.1819

Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**213.5327**	**0.7811**	**0.0202**	**236.1819**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	29.2307	1.7275	0.0000	65.5079
Unmitigated	29.2307	1.7275	0.0000	65.5079

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Day-Care Center	0	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	144	29.2307	1.7275	0.0000	65.5079
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**29.2307**	**1.7275**	**0.0000**	**65.5079**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Day-Care Center	0	0.0000	0.0000	0.0000	0.0000
Junior College (2Yr)	144	29.2307	1.7275	0.0000	65.5079
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**29.2307**	**1.7275**	**0.0000**	**65.5079**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

CALINE 4 ASSUMPTIONS

Carbon Monoxide Hotspot Analysis

CL4 Assumptions

Beach Boulevard & Center Avenue
2024 Existing Plus Project
Job Parameters

File Name	BB & CA
Job	Golden West College
Run type	Worst-case wind angle
Aerodynamic roughness coefficient	Suburban
Link/Receptor Geometry	feet
Altitude above sea level (ft)	31
Number of links	3
Number of receptors	3
Averaging interval	1 hour

Link geometry

	Caline Input						(for graphing purposes only)			
Link name	link type	endpoint 1 coordinate x	endpoint 1 coordinate y	endpoint 2 coordinate x	endpoint 2 coordinate y	link height	mixing zone width	endpoint 1 coordinate x	endpoint 1 coordinate y	endpoint 2 coordinate x	endpoint 2 coordinate y
Link A	at-grade	2000	2000	2000	2500	0	180	0	0	0	500
Link B	at-grade	2000	1500	2000	2000	0	155	0	-500	0	0
Link C	at-grade	1551	2219	2000	2000	0	215	-449	219	0	0

Link activity

Link/run	Traffic volume	Emission factor	*2014*
Link A	7588	1.3	
Link B	7154	1.3	
Link C	2832	1.3	
	17574		

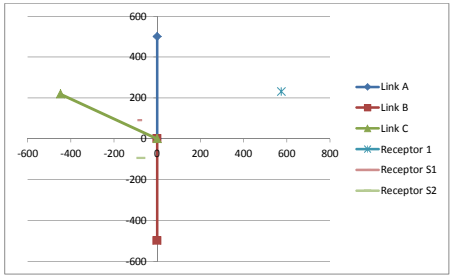


Run conditions

Run:	Hour 1	
Wind speed (m/s)	1	
Wind direction (degrees)	0	
Wind direction standard deviation (degrees)	10	
Atmospheric stability class (1-7)	7	
Mixing height (m)	10 meters	
Ambient temperature (degrees Celsius)	4.4	7.2
Ambient pollutant concentration	2.9	

Receptor positions

	Caline Input			(for graphing purposes only)	
Receptor list - name	x	y	z	x	y
Receptor 1	2575	2230	5.9	575	230
Receptor S1	1910	2090	5.9	-90	90
Receptor S2	1925	1905	5.9	-75	-95



EMFAC Assumptions

Ambient temperature	40 F	4.4 C
Ambient humidity	55%	
Veh type, Veh tech	all, all	
Speed	35 mph	
Year	2024	

IV. Model Results Worst Case Wind Angle

	RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	
1	Recpt	**1**	261	3.1	0.1	0	0.1
2	Recpt	**S1**	166	3.3	0.1	0.3	0
3	Recpt	**S2**	11	3.3	0.3	0.1	0.1

	RECEPTOR	1-HOUR	8-HOUR Persistence Factor		
			0.8	**0.7**	**0.6**
1	Recpt	1	2.48	2.17	1.86
2	Recpt	S1	2.64	2.31	1.98
3	Recpt	S2	0	0	0

* A persistence factor of 0.7 was used in the Air Quality Analysis
Generalized persistence factors (CO Protocol, Table B.15)
0.6: Rural and suburban
0.7: Urban locations
0.8: Urban sites with a recognized tendency for persistent stagnant meteorological conditions and/or persistent traffic congestion

CL4 Assumptions

Beach Boulevard & Edinger Avenue
2024 Existing Plus Project
Job Parameters

File Name	BB & EA	
Job	Golden West College	
Run type	Worst-case wind angle	
Aerodynamic roughness coefficient	Suburban	
Link/Receptor Geometry	feet	
Altitude above sea level (ft)		31
Number of links		4
Number of receptors		6
Averaging interval	1 hour	

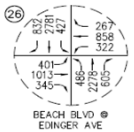
Link geometry

		Caline Input						(for graphing purposes only)			
Link name	link type	endpoint 1 coordinate x	endpoint 1 coordinate y	endpoint 2 coordinate x	endpoint 2 coordinate y	link height	mixing zone width	endpoint 1 coordinate x	endpoint 1 coordinate y	endpoint 2 coordinate x	endpoint 2 coordinate y
Link A	at-grade	2000	2000	2000	2500	0	180	0	0	0	500
Link B	at-grade	2000	1500	2000	2000	0	165	0	-500	0	0
Link C	at-grade	1500	2000	2000	2000	0	140	-500	0	0	0
Link D	at-grade	2000	2000	2500	2000	0	135	0	0	500	0

Link activity

Plus (+) 33 feet

Link/run	Traffic volume	Emission factor		2014			
Link A	6986	0.9		Link A	160	193
Link B	6817	0.9		Link B	130	163
Link C	3935	0.9		Link C	55	88
Link D	3492	0.9		Link D	65	98
	21230					

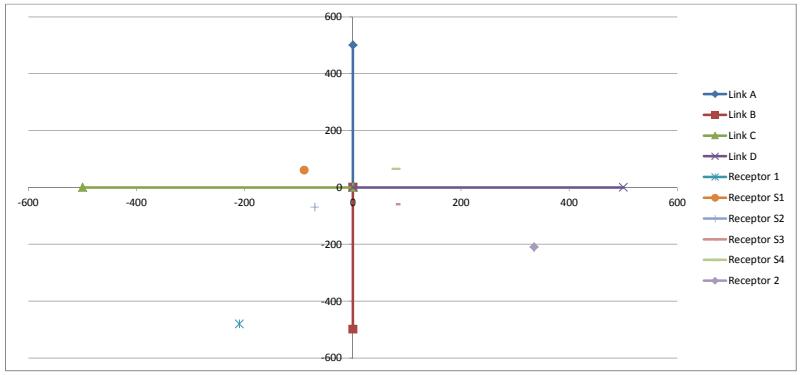


Run conditions

Run:	Hour 1	
Wind speed (m/s)		1
Wind direction (degrees)		0
Wind direction standard deviation (degrees)		10
Atmospheric stability class (1-7)		7
Mixing height (m)	10 meters	
Ambient temperature (degrees Celsius)		4.4 7.2
Ambient pollutant concentration		2.9

Receptor positions

Receptor list - name	Caline Input x	y	z	(for graphing purposes only) x	y
Receptor 1	1790	1520	5.9	-210	-480
Receptor 2	2335	1790	5.9	335	-210
Receptor S1	1910	2060	5.9	-90	60
Receptor S2	1930	1930	5.9	-70	-70
Receptor S3	2080	1940	5.9	80	-60
Receptor S4	2080	2065	5.9	80	65



EMFAC Assumptions

Ambient temperature	40 F	4.4 C
Ambient humidity	55%	
Veh type, Veh tech	all, all	
Speed	35 mph	
Year	2024	

IV. Model Results Worst Case Wind Angle

	RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D		
1	Recpt	**1**	19	**3.2**	0.2	0.1	0	0	3.2
2	Recpt	**2**	292	**3.1**	0	0.1	0.1	0	3.1
3	Recpt	**S1**	165	**3.3**	0	0.3	0.1	0	3.3
4	Recpt	**S2**	11	**3.3**	0.3	0.1	0.1	0	3.4
5	Recpt	**S3**	347	**3.3**	0.3	0	0	0.1	3.3
6	Recpt	**S4**	193	**3.3**	0	0.3	0	0.1	3.3

	RECEPTOR	1-HOUR	8-HOUR Persistence Factor		
			0.8	**0.7**	**0.6**
1	Recpt	1	3.2	2.56	2.24	1.92
2	Recpt	S1	3.1	2.48	2.17	1.86
3	Recpt	S2	3.3	2.64	2.31	1.98
4	Recpt	S3	3.4	2.72	2.38	2.04
5	Recpt	S4	3.3	2.64	2.31	1.98

* A persistence factor of 0.7 was used in the Air Quality Analysis
Generalized persistence factors (CO Protocol, Table B.15)
0.6: Rural and suburban
0.7: Urban locations
0.8: Urban sites with a recognized tendency for persistent stagnant meteorological conditions and/or persistent traffic congestion

Caline 4 Assumptions

Beach Boulevard & McFadden Avenue
2024 Existing Plus Project
Job Parameters

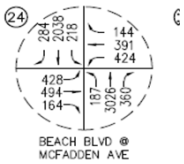
File Name	BB & MA
Job	Golden West College
Run type	Worst-case wind angle
Aerodynamic roughness coefficient	Suburban
Link/Receptor Geometry	feet
Altitude above sea level (ft)	32
Number of links	4
Number of receptors	7
Averaging interval	1 hour

Link geometry

	Caline Input						(for graphing purposes only)			
		endpoint 1	endpoint 1	endpoint 2	endpoint 2		mixing zone width	endpoint 1	endpoint 1	endpoint 2	endpoint 2
Link name	link type	coordinate x	coordinate y	coordinate x	coordinate y	link height	(+20 feet added)	coordinate x	coordinate y	coordinate x	coordinate y
Link A	at-grade	2000	2000	2000	2500	0	155	0	0	0	500
Link B	at-grade	2000	1500	2000	2000	0	155	0	-500	0	0
Link C	at-grade	1500	2000	2000	2000	0	108	-500	0	0	0
Link D	at-grade	2000	2000	2500	2000	0	105	0	0	500	0

Link activity

Link/run	Traffic volume	Emission factor	*2014*
Link A	6138	1	
Link B	6199	1	
Link C	1948	1	
Link D	2031	1	
	16316		

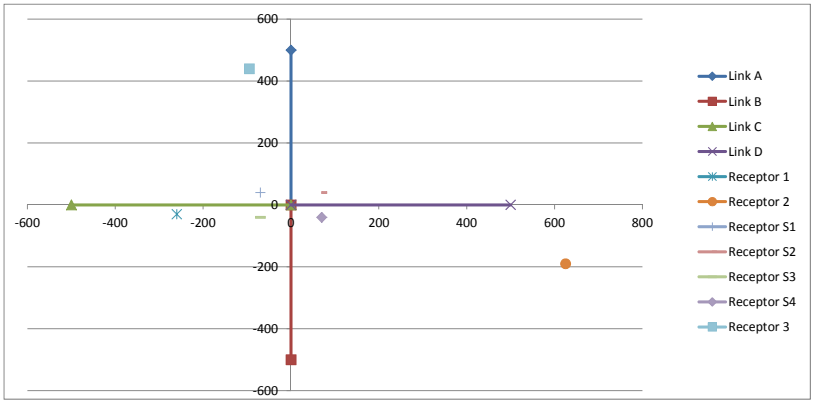


Run conditions

Run:	Hour 1	
Wind speed (m/s)	1	
Wind direction (degrees)	0	
Wind direction standard deviation (degrees)	10	
Atmospheric stability class (1-7)	7	
Mixing height (m)	10 meters	
Ambient temperature (degrees Celsius)	4.4	7.2
Ambient pollutant concentration (ppm)	2.9	

Receptor positions

	Caline Input			(for graphing purposes only)	
Receptor list - name	x	y	z	x	y
Receptor 1	1740	1970	5.9	-260	-30
Receptor 2	2625	1810	5.9	625	-190
Receptor 3	1905	2440	5.9	-95	440
Receptor S1	1930	2040	5.9	-70	40
Receptor S2	2070	2040	5.9	70	40
Receptor S3	1930	1960	5.9	-70	-40
Receptor S4	2070	1960	5.9	70	-40



EMFAC Assumptions

Ambient temperature	40 F	4.4 C
Ambient humidity	55%	
Veh type, Veh tech	all, all	
Speed	35 mph	
Year	2024	

IV. Model Results Worst Case Wind Angle

	RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	
1	Recpt	**1**	86	3.2	0	0.1	0.1	0.1
2	Recpt	**2**	286	3.1	0	0.1	0	0
3	Recpt	**3**	170	3.3	0.2	0.2	0	0
3	Recpt	**S1**	168	3.3	0	0.3	0.1	0
4	Recpt	**S2**	192	3.3	0	0.3	0	0.1
5	Recpt	**S3**	12	3.3	0.3	0	0.1	0
6	Recpt	**S4**	348	3.3	0.3	0	0	0.1

	RECEPTOR	1-HOUR	8-HOUR Persistence Factor* 0.8	0.7	0.6
1	Recpt	1	3.2	2.56	2.24	1.92
2	Recpt	2	3.1	2.48	2.17	1.86
3	Recpt	3	3.3	2.64	2.31	1.98
3	Recpt	S1	3.3	2.64	2.31	1.98
4	Recpt	S2	3.3	2.64	2.31	1.98
5	Recpt	S3	3.3	2.64	2.31	1.98
6	Recpt	S4	3.3	2.64	2.31	1.98

* A persistence factor of 0.7 was used in the Air Quality Analysis
Generalized persistence factors (CO Protocol, Table B.15)
0.6: Rural and suburban
0.7: Urban locations
0.8: Urban sites with a recognized tendency for persistent stagnant meteorological conditions and/or persistent traffic congestion

APPENDIX C

Biological Resources Letter Report

DUDEK

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September 6, 2013 7910.0001

Mr. Jerry Marchbank
Senior Director, Facilities, Planning and Construction
Coast Community College District
1370 Adams Avenue
Costa Mesa, California 92626

Subject: Biological Resources Letter Report for Impacts Associated with the Golden West College Project Located in Huntington Beach, Orange County, California

Dear Mr. Marchbank:

This letter report provides an analysis of potential biological resource impacts associated with the proposed modifications to Golden West College located in Huntington Beach, northwest Orange County, California. The Coast Community College District (District) is proposing to update its Facilities Master Plan for all of its Orange County campuses, including Golden West College (GWC). As part of this update, the District is planning comprehensive improvement of its building program to meet enrollment needs; and plans to make upgrades and repairs of existing buildings, as well as to construct new facilities to improve the safety and education experience of those attending the colleges in accordance with Measure M.

This letter report provides an introduction, the project location, the project description, the survey methods, existing biological resources, special-status biological resources, and results/conclusion based on an evaluation of biological resources present within the study area conducted on August 6, 2013.

1.0 INTRODUCTION

The proposed modifications to Golden West College (GWC) (Project) include upgrades and repairs to existing buildings; construction of new facilities; and improvements to various parking, vehicular, and pedestrian circulation. The Project activities are planned to occur within the approximately 109-acre GWC site in the City of Huntington Beach, California. The Project is less than a quarter mile southwest from Interstate 405 (I-405); and approximately 0.75 mile west from State Route 39.

A biological survey of the project site was conducted by a Dudek biologist in late summer 2013 to inventory the existing resources present on site. The purpose of this biological letter report is to describe the biological character for the project site in terms of vegetation, flora, potentially

jurisdictional waters and wetlands, wildlife, and wildlife habitats; provide an analysis of impacts to special-status biological resources based on the proposed project scenarios; and analyze the biological significance of the site with respect to regional biological resource planning. The biological survey discussed in this letter report concentrated on identifying biological resources that may be subject to regulation under Sections 1600-1603 of the Fish and Game Code as administered by the California Department of Fish and Wildlife (CDFW), Section 404 of the Clean Water Act as administered by the U.S. Army Corps of Engineers (ACOE), Section 401 of the Clean Water Act and the Porter Cologne Act as administered by Regional Water Quality Control Board (RWQCB), and other potential special-status biological resources.

2.0 PROJECT LOCATION

The Project is located in the City of Huntington Beach in northwest Orange County, California. Surrounding cities include Westminster to the north, Santa Ana to the east, and Huntington Beach to the south and west (Figure 1). More specifically, GWC is bound by McFadden Avenue to the north, Gothard Street to the east, Edinger Avenue to the south, and Goldenwest Street to the west (Figure 2). A CVS Pharmacy is located at the northeastern portion of GWC, southwest of the intersection of McFadden Avenue and Goldenwest Street, on a site owned by the District. A retail center (not owned by the District) borders GWC at the southeastern corner of the campus and is bound by Edinger Avenue to the south and Gothard Street to the east. Low-density residential neighborhoods and Greer Park are to the north and west of the Project, north of McFadden Avenue and west of Goldenwest Street; commercial/retail neighborhoods are located south of Edinger Avenue and east of Gothard Street; a bus depot and SCE easement area are located east of the project site; and College Park is located northeast of campus, north of McFadden Avenue and south of I-405. The approximate centroid of the project is 33°44'02.35" north latitude, 118°00'11.42" west longitude on the U.S. Geological Service (USGS) 7.5 minute series topographic Seal Beach and Newport Beach maps. The campus is within minutes of Interstate 405 (I-405) and State Route 39.

3.0 PROJECT DESCRIPTION

Based on recommendations provided by the Vision 2020 Facilities Master Plan and an analysis of the evolving student body, the Project consists of incorporating upgrades and repairs to existing buildings, including the Automotive Technology Building, Physical Education Outdoor Labs, the Central Warehouse/Corporation Yard, and the Technology Building; construction of new facilities, including a Math/Science Building, a Language Arts Complex, a Business/Social Sciences/Administrative Office Building, a Cosmetology Building, a Criminal Justice Training Center, a One Stop Student Center, and Boys & Girls Club Gymnasium Facilities; and

implementation of various parking, vehicular, and pedestrian circulation improvements. The proposed project would occur within the existing GWC campus boundary.

Topography and Land Uses

Topography on site is generally flat with elevations ranging from 25 feet above mean sea level (AMSL) within the parking lot areas around the perimeter of GWC campus to 40 feet AMSL along the central eastern portion of the study area within a terraced outdoor amphitheater.

The study area is not within any adopted habitat conservation plan, natural community conservation plan areas or other approved local or regional habitat conservation plan areas. The Project is subject to local, state, and federal laws and regulations pertaining to biological resources, including the federal Migratory Bird Treaty Act and California Fish and Game Codes.

Soils

According to the U.S. Department of Agriculture and Natural Resources Conservation Services (2013), three soil types from one soil series are mapped within the project study area: Bolsa silt loam, drained, Bolsa silty clay loam, and Bolsa silty clay loam, drained. The majority of the project area is comprised of Bolsa silt loam, drained soils. Bolsa silty clay loam and Bolsa silty clay loam, drained soils make up a small portion northeastern portion of the project area, where the existing CVS and GWC parking lot occurs (Figure 3).

The Bolsa Series consists of deep and somewhat poorly drained soils, formed in stratified alluvium derived from mixed sources (OSD 2013). This soil series is associated with alluvial fans, flood plains and basins, with 0 to 2% slopes. The soil surface layer is typically comprised of light brownish gray silt loam approximately 12 inches thick; followed by light brownish gray silt loam with faint mottles 17 inches thick; and then a light brownish gray silty clay loam with common reddish yellow mottles to a depth of 65 inches or more (USDA 1978). This soil is moderately alkaline throughout and calcareous to a depth of 49 inches (USDA 1978).

All three soil types (Bolsa silt loam, drained, Bolsa silty clay loam, drained, and Bolsa silty clay loam) generally occur on large alluvial fans, flood plains, and basins at nearly level terrain. These soils are found at elevations ranging from 10 to 300 feet (OSD 2013). Bolsa silt loam, drained soil has the profile typical of this series and runoff is slow when the soil is bare. Bolsa silty clay loam and Bolsa silty clay loam, drained soils have profiles similar to the typical series profile except that the texture is silty clay loam instead of silt loam (USDA 1978). The main difference between Bolsa silty clay loam and Bolsa silty clay loam, drained soils is that Bolsa silty clay loam soils have very slow runoff, while Bolsa silty clay loam, drained soils have slow

runoff. Typical vegetation associated with the Bolsa Series includes annual grasses and forbs, though Bolsa soils are also used for row crops, field crops and urban development (USDA 1978).

4.0 METHODS

Data regarding biological and jurisdictional resources present within the study area were obtained through a review of pertinent literature and field reconnaissance; both are described in detail below.

Literature Review

The following data sources were reviewed to assist with the biological and jurisdiction efforts:

- Natural Resource Conservation Service (NRCS) Websoil Survey (U.S. Department of Agriculture) (USDA 2013)
- California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) (CDFW 2013)
- U.S. Fish and Wildlife Database (USFWS 2013)
- California Native Plant Society Inventory of Rare and Endangered Plants (CNPS 2013)

Field Reconnaissance

The survey was performed by Dudek biologist, Johanna Page, on August 6, 2013 (Table 1). The biological survey included documenting vegetation communities and land cover present within the project study area, an evaluation of potential jurisdictional wetlands or waters, and an evaluation of the potential for special-status species to occur in the study area. The project study area is defined as the existing college campus (south of McFadden Avenue and north of Edinger), and a surrounding 150-foot buffer around the project area.

Table 1
Survey Conditions

Date	Time	Personnel	Survey Conditions
8/6/2013	1205-1422	Johanna Page	0% cloud cover; 8-9 to 5-6 miles per hour wind; 78˚-81˚Fahrenheit

Resource Mapping

The survey was conducted on foot to visually cover 100% of the project study area and an aerial photograph map with an overlay of the project boundary was utilized to record the vegetation communities and special-status biological resources directly in the field. Observable biological resources including perennial plants and conspicuous wildlife (i.e., birds) commonly accepted as regionally sensitive by the California Native Plant Society (CNPS), California Department of Fish and Wildlife (CDFW), and U.S. Fish and Wildlife Service (USFWS) were recorded on the field map, when identified. Additionally, an assessment and determination of potential for locally recognized special-status species to occur on site was conducted.

The *Habitat Classification System Natural Resources Geographic Information System* (Gray and Bramlet 1992) was used to describe vegetation community and land cover within the study area. General information regarding vegetation communities and plant species was obtained from Gray and Bramlet (1992), Sawyer et al. (2009), Jones and Stokes (1993), and Hickman (1993).

Flora and Fauna

All plant species encountered during the field survey were identified and recorded directly into a field notebook. Those species that could not be identified immediately were brought into the laboratory for further investigation. Binoculars (8.5x42 magnifications) were used to aid in the identification of plants within areas inaccessible during the field survey. A compiled list of plant species observed in the study area is presented in Appendix A.

Wildlife species detected during the field survey by sight, calls, tracks, scat, or other signs were recorded directly onto a field notebook. Binoculars (8.5x42 magnifications) were used to aid in the identification of wildlife. In addition to species actually detected during the surveys, expected wildlife use of the site was determined by known habitat preferences of local species and knowledge of their relative distributions in the area. A list of wildlife species observed in the study area is presented in Appendix A.

Latin and common names of animals follow Crother (2008) for reptiles and amphibians, American Ornithologists' Union (AOU 2012) for birds, Wilson and Reeder (2005) for mammals, and NABA (2001) for butterflies.

Latin and common names for plant species with a California Rare Plant Rank (CRPR) (formerly CNPS list) follow the California Native Plant Society On-Line Inventory of Rare, Threatened, and Endangered Plants of California (CNPS 2013). For plant species without a CRPR, Latin

names follow the Jepson Interchange List of Currently Accepted Names of Native and Naturalized Plants of California (Jepson Flora Project 2013).

Special-Status Biological Resources

Special-status biological resources are those defined as follows: (1) species that have been given special recognition by federal, state, or local conservation agencies and organizations due to limited, declining, or threatened population sizes; (2) species and habitat types recognized by local and regional resource agencies as sensitive; (3) habitat areas or vegetation communities that are unique, are of relatively limited distribution, or are of particular value to wildlife; (4) wildlife corridors and habitat linkages; and (5) biological resources which may or may not be considered sensitive, but are regulated under local, state, and/or federal laws.

Searches through the California Native Plant Society (CNPS 2013) online inventory database and California Natural Diversity Database (CNDDB) online inventory were conducted to assist in the determination of special-status plant and animal species potentially present on site (CDFW 2013). Specifically, both a one-quad search and a nine-quad search were conducted. Special-status species with documented occurrence within the project area based on a nine-quad search were individually evaluated in relation to the project site to assist in determining the level of potential to occur on site.

5.0 RESULTS

The quantification of biological resources described herein pertains to the project boundary totaling approximately 109-acres.

Land Cover Types

Five land cover types were identified within the project boundary, including: eucalyptus woodland, ornamental plantings, ruderal habitat, disturbed habitat, and developed land. The land cover types observed on site are described in detail below, their acreages are presented in Table 2, and their spatial distributions are shown in Figure 4.

Table 2
Vegetation Communities and Land Cover Types on Site

Vegetation Community/Land Cover Type	Acreage
Developed	61.63
Disturbed	1.45

Eucalyptus Woodland	1.56
Ornamental Plantings (Native Garden is 1.46 acres)	43.34
Ruderal	1.04
Total	**109.02**

Eucalyptus Woodland (8.0) is not recognized as a native plant community by Gray and Bramlet (1992); however, eucalyptus woodland is a distinct "naturalized" vegetation type that is fairly widespread in southern California and is considered a woodland habitat. It typically consists of monotypic stands of introduced Australian eucalyptus trees (*Eucalyptus* spp.). The understory is either depauperate or absent owing to shade and the possible allelopathic (toxic) properties of the eucalyptus leaf litter. Although eucalyptus woodlands are of limited value to most native plants and animals, they frequently provide nesting and perching sites for several raptor species and overwintering sites for monarch butterflies (*Danaus plexippus*). Australian eucalyptus trees are found in monotypic stands along the eastern portion of the proposed project site. Where Australian eucalyptus trees are associated with other tree species they have been categorized within the ornamental planting land cover type (see ***Ornamental Plantings*** below). A total of 1.56 acres of eucalyptus woodland are mapped within the project area.

Ornamental Plantings (15.5) consists of introduced planting of exotic species as landscaping, including greenbelts, parks, and horticultural plantings throughout the County (Jones and Stokes 1993). Ornamental plantings within the project area are diverse and include a small native garden located within the central eastern portion of campus. The majority of the project site is comprised of ornamental plantings dominated by trees, including various pines (*Pinus* spp.), eucalyptus spp., Peruvian peppertree (*Schinus molle*), pygmy date palm (*Phoenix roebelenii*), queen palm (*Syagrus romanzoffiana*), maidenhair tree (*ginkgo biloba*), carrotwood (*Cupaniopsis* anacardioides), Italian cypress (*Cupressus sempervirens*), blue jacaranda (*Jacaranda mimosifollia*), Chineese elm (*Ulmus parviflora*), southern magnolia (*Magnolia* grandiflora), weeping bottlebrush (*Callistemon citrinus*), weeping willow (*Salix babylonica*), banana (*Musa* sp.), and regularly maintained lawns and sports fields (e.g., soccer field, baseball field, and football field). The native garden on site is approximately 1.46 acres of the total ornamental planting mapped on site and is comprised of native chaparral and coastal scrub vegetation. The native garden contains purple Chinese houses (*Collinsia heterophylla*), conejo buckwheat (*Eriogonum crocatum*), California poppy (*Eschscholzia californica*), Coulter's matilija poppy (*Romneya coulteri*), sage (*Salvia* spp.), oaks (*Quercus* spp.), elegant clarkia (*Clarkia unguiculata*), desert willow (*Chilopsis linearis*), and laurel sumac (*Malosma laurina*). Ornamental plantings make up approximately 43.34 acres of the project area and are located throughout the GWC campus area.

Ruderal Habitat (4.6) is not recognized as a native plant community by Gray and Bramlet (1992); and is dominated by weedy introduced species typically associated with disturbed ground. Ruderal habitat is similar to annual grassland in that non-native species predominate over natives and native habitat recovery is unlikely. Ruderal habitat differs from annual grassland in that non-native forbs become more dominant in ruderal habitat, as opposed to grasses. Dominant species associated with ruderal habitat include bromes (*Bromus* spp.), oats (*Avena* spp.), *Centaurea* spp., barley (*Hordeum* spp.), cheeseweed mallow (*Malva parviflora*), *Salsola,* mustard (*Brassica* spp.), California croton (*Croton californicus*), filaree (*Erodium* spp.), goldenaster (*Heterotheca* spp.), and Australian saltbush (*Atriplex semibaccata*). Ruderal habitat was observed in one location along the northeastern portion of the project site. Ruderal habitat on site totals 1.04 acres and was dominated by black mustard (*Brassica nigra*), bromes (*Bromus* spp.), filaree, Canadian horseweed (*Erigeron canadensis*), prickly Russian thistle (*Salsola tragus*), iceplant (*Carpobrotus* sp.), yellow sweetclover (*Melilotus albus*), and eucalyptus. The area surrounding the ruderal habitat is used as a parking lot and was fenced in during the field visit; therefore, a binocular survey was conducted along the perimeter of the site. Most of the grasses had already set seed and were therefore, difficult to determine to species.

Disturbed Habitat (16.1) refers to areas that have been permanently altered by previous human activity, eliminating future biological value of the land for most species. The native or naturalized vegetation is no longer present and the land lacks habitat value for sensitive wildlife, including potential raptor foraging. Typically, vegetation, if present, is nearly exclusively composed of non-native plant species such as ornamentals or ruderal exotic species (i.e., weeds). Disturbed land found within the project area consists primarily of graded storage areas and laydown yards. There is one disturbed area within the project area, totaling 1.45 acres, which is compacted and utilized as a storage/laydown yard. This area is located at the northeastern portion of the campus, west of Gothard Street.

Developed (15.0) land refers to areas that have been constructed upon or disturbed so severely that native vegetation is no longer supported. Developed land includes areas with permanent or semi-permanent structures, buildings, pavements, roads, and highways (Gray and Bramlet 1992). Typically, this land cover type is unvegetated or supports a variety or ornamental plants. Developed areas within the project area include buildings, facilities, pedestrian walkways, and parking lots. Development is the dominant land cover type within the project area, totaling 61.63 acres.

Jurisdictional Waters

Hydrology and vegetation were examined throughout the project study area during the site visit to identify potential wetland sites and/or non-wetland waters (i.e., drainages, channels, etc.),

though an official Jurisdictional Delineation was not performed. No jurisdictional wetlands or non-wetland waters occur within the study area.

Flora and Fauna

A total of 54 species of vascular plants, 28 native and 26 non-native species, were recorded during the reconnaissance survey (Appendix A). The high diversity of native plants recorded within the project site is attributed to the planted and maintained native garden located along the western portion of the GWC campus. The majority of the native species, 25 of the 28 native plant species, documented within the project area were identified within this native garden. Since the native garden represents only 3% of the ornamental planting landscape and 1.3% of the total project site, these numbers are not representative of the total project area. In actuality, the overall project area contains a relatively low diversity of native plant species due to the ornamental plantings within the existing development and urban setting of the study area.

A total of eleven wildlife species were recorded in the project area during the survey (Appendix A). Most wildlife species observed are common, disturbance-adapted species typically found in urban and suburban settings, such as house sparrow (*Passer domesticus*), house finch (*Carpodacus mexicanus*), American crow (*Corvus brachyrhynchos*), and mourning dove (*Zenaida macroura*). Additionally, there is suitable habitat for small wildlife species (e.g., invertebrates, reptiles, and small mammals) within the study area. Overall, the diversity of wildlife species in the study area is low due to the existing development and urban setting of the study area; however, the native garden on site has the potential to attract native wildlife species into the project area.

Special-Status Flora and Fauna

One special-status species was observed within the survey area: Monarch butterfly (California Special Animal List). No other federally or state listed species or other special-status species were observed within the survey area during the field visit. A search of CNPS and CNDDB records was utilized to develop matrices of special-status plant and wildlife species that have potential to occur on site due to the presence of suitable habitat (taking into consideration vegetation communities, soils, elevation, and geographic range, life form/blooming period, etc.). These two matrices of special-status plant and wildlife species (i.e., federally, state, or locally listed species), their favorable habitat conditions, and their potential to occur on site based on the findings of the field investigations are presented in Appendix B and C, respectively.

None of the plant species presented in Appendix B were detected during the field survey. Additionally, no special-status plant species were determined to have a moderate or high potential to naturally occur within the project area due to the disturbed condition of the site and the surrounding urban environment. There is, however, the possibility that a special-status plant could be planted on site; however, this would not be part of a naturally occurring community.

There are three special-status wildlife species determined to have a moderate to high potential to occur on site. A monarch butterfly was detected during the field survey and is the only wildlife species presented in Appendix C determined to have a high potential to occur on site. The eucalyptus woodland and ornamental trees observed throughout the proposed project site could provide wintering habitat for the monarch butterfly (California Special Animal List).

Moderate potential exists for one special status bird species and one special-status mammal species to occur on site, Cooper's hawk (*Accipiter cooperii*) (California Watch List Species) and western yellow bat (*Lasiurus xanthinus*) (California Species of Special Concern). Cooper's hawk has become adapted to and more frequently observed within urban areas. The eucalyptus woodland and ornamental trees on site provide suitable nesting habitat for this species. Western yellow bat is known to occur within residential areas. The eucalyptus woodland and ornamental trees on site are suitable to support day roosts for this species.

6.0 RELATIONSHIP TO MSHCP

The project is not located within any adopted habitat conservation plan, natural community conservation plan, or local or regional habitat conservation plan areas. Additionally, the project is not located within any Non-Reserve Supplemental Habitat Special Linkages and/or Existing Use Areas identified within the Natural Community Conservation Plan and Habitat Conservation Plan for the County of Orange Central and Coastal Subregions (Central-Coastal NCCP/HCP) (County EMA 1996). Since the project is not located within any approved plan areas, the Project would not impact the goals and objectives of any adopted plans. Additionally, the site is proposed to occur within an existing college campus.

7.0 RESULTS/CONCLUSION

The Project is proposing to incorporate upgrades and repairs to existing buildings; construct new facilities; implement various parking, vehicular, and pedestrian circulation improvements; develop new facilities and improve existing programs within the existing GWC campus. GWC is an active college campus offering day and night courses; and therefore, has a high volume of foot-traffic and human presence throughout the day. Since

the proposed project would occur within the college campus, modifications to these areas would not change the existing conditions in the region. The low-density residential and commercial developments bordering the college campus offer minimal suitable habitat to support special status species. GWC campus is primarily developed and disturbed, comprised of ornamental plantings. Although not considered native communities, the ruderal habitat, eucalyptus woodland, and ornamental plantings mapped on site have the potential to support three special-status wildlife species.

The Project is not located within or adjacent to any designated conservation plan, natural community conservation plan, or local or regional habitat conservation plan areas; and would therefore not impact the goals and objectives of any adopted plans. Although an official Jurisdictional Delineation was not performed, jurisdictional wetlands or non-wetland waters were not identified within the project area. Additionally, riparian habitats were not identified within the project area. Implementation of the proposed project activities would not result in impacts to state and federally jurisdictional waters (and wetlands) or riparian habitat.

The Project is subject to local, state and federal laws and regulations pertaining to biological resources, including the federal MBTA and California Fish and Game Codes. There is one special-status wildlife species with high potential and two special-status wildlife species with moderate potential to occur within the project area. No special-status plants are likely to occur within the project area. Additionally, the planting, maintenance, and removal of trees protected under the City of Huntington Beach Municipal Code are anticipated as part of the proposed project activities. Potential project impacts to these species are discussed in detail below.

Plants

Special-status plants are not known to occur within the study area; nor do any special-status plant species have a potential to naturally occur within the proposed project area. The project is planned to occur within an existing college campus and graded retail center, surrounded by residential and commercial development. The land cover types identified within the study area include eucalyptus woodland, ornamental plantings, ruderal habitat, disturbed habitat, and developed land, none of which are recognized as a native plant community by Gray and Bramlet (1992). Although the native garden that exists within project area is comprised of native chaparral and coastal scrub plants, these plants are not part of a naturally occurring community. Additionally, the native garden on site is not anticipated to be impacted by the proposed project activities. The only area with potential to support any natural vegetation is a small 1.04-acre ruderal area located along the northeastern portion of the campus. Ruderal habitat on site appears to be routinely disturbed with very minimal potential to support special-status species.

Implementation of the proposed project is not anticipated to impact special-status plant species, thus impacts to special-status plants are anticipated to be less than significant.

Avian

There is potential for one sensitive avian species to occur within the proposed project area; Cooper's hawk (California Watch List species) (nesting only). Cooper's hawk populations have increasingly been observed breeding within urban and suburban areas (Curtis and Rosenfield 2006). In urban areas, Cooper's hawks are known to nest within tall ornamental trees (e.g., eucalyptus spp.) within developed areas (including commercial and industrial areas) (Chiang et al. 2012). Data documented by Chiang (2004) suggest that Cooper's hawks in Southern California appear to be year-round residents and remain close to their nest stands during winter. Though no Cooper's hawk or raptor nests were identified during the field visit, the project area contains tall ornamental trees (i.e., eucalyptus and pine species) that provide suitable nesting substrate to support this species. The closest active Cooper's hawk nest was documented just outside the fence of Shipley Nature Center in Huntington Beach, approximately 1.5 miles south of the project area (McQuade 2007). GWC keeps a log of the birds sighted at the native garden each month, dating back to 2010 (Songster 2013). Cooper's hawk was identified within the native garden in March and August of 2012; and May of 2010. (The species list has not yet been updated for 2013.) Although this species has been documented to utilize the native gardens on site, Cooper's hawks have not been observed nesting within the college campus (Friends of Goldenwest 2013). Nonetheless, it is recommended that the proposed project activities be planned to occur outside of the general nesting season (February 1 to August 31). If construction activities must occur within the general nesting season, a preconstruction nesting bird survey is recommended, given the guidelines below.

The eucalyptus woodland, ornamental planting, and ruderal habitat within the project area have the potential to support nesting birds protected under the federal Migratory Bird Treaty Act (MBTA) and/or California Department of Fish and Game Code (including Cooper's hawk discussed above). If construction activities are scheduled to take place during the general bird breeding season (i.e., February 1 through August 31), it is recommended that a nesting bird survey be conducted by a qualified biologist to determine the presence of nests or nesting birds within 300 feet (500 feet for raptors) (given the level of disturbance associated with the project area) of the construction activities.

The nesting bird survey shall be completed no more than 72 hours prior to any construction activities. The survey will focus on special-status species known to use the area as well as other nesting birds that are protected under the MBTA and California Fish and Game Codes. If

an active nest (defined by the presence of eggs or young) is identified, grading or site disturbance within an appropriate buffer (e.g., 500 feet for raptors and 250 feet for other birds) of the nest shall be monitored by a qualified biologist daily until project activities are no longer occurring within the required avoidance buffer of the nest or until fledglings become independent of the nest. The monitoring biologist may adjust the buffer radius if he or she determines it is necessary. The monitoring biologist shall halt construction activities determined to be disturbing nesting activities. The monitor shall make practicable recommendations to reduce the noise or disturbance in the vicinity of the nest. This may include recommendations such as (1) turning off vehicle engines and other equipment whenever possible to reduce noise, (2) working in other areas until the young have fledged, or (3) placing noise barriers to maintain the noise at the nest to 60 dBA L_{eq} hourly or less or to the preconstruction ambient noise level if that exceeds 60 dBA L_{eq} hourly. The on-site biologist will review and verify compliance with these nesting boundaries and will verify that the nesting effort has finished. Construction activities restricted by this measure can resume when no other active nests are found within the restricted area.

"Nest" is defined as: a structure or site under construction or preparation, constructed or prepared, or being used by a bird for the purpose of incubating eggs or rearing young. Perching sites and screening vegetation are not part of the nest. "Active nest" is defined as: once birds begin constructing, preparing or using a nest for egg-laying. A nest is no longer an "active nest" if abandoned by the adult birds or once nestlings or fledglings are no longer dependent on the nest.

Invertebrates

Monarch butterflies (California Special Animal List) are known to overwinter within a small stand of ornamental trees (i.e., pines) at the central eastern portion of the GWC campus, immediately south of the outdoor amphitheater and eucalyptus woodland area (The Monarch Program 2013) (Figure 4). Additionally, a monarch butterfly was observed flying through that same area during the field survey (Figure 4). Although the monarch butterfly is not state- or federally- listed, overwintering sites are important for the conservation of this species and are protected within California. Overwintering monarchs are known to travel during the day and roost in tight colonies within a single tree at night for warmth. They typically overwinter in select areas of coastal California and are known to return to the same locations annually. It is important that overwintering sites be protected when practicable, especially during the overwintering months (October 1 to March 1). The trees utilized by overwintering monarchs during previous years are not anticipated to be removed during the proposed project activities.

Additionally, construction activities are anticipated to occur during daylight hours. Therefore, impacts to this species are anticipated to be less than significant.

Mammals

The western yellow bat (California Species of Special Concern) is the only special status mammal species with moderate potential to occur on site. The field visit occurred during the day, which is conducive for detecting most of the wildlife expected to occur within the project area, but may not be appropriate for directly detecting wildlife species (such as bats) that are active at night and dormant during the daytime.

The closest known occurrence of western yellow bat was documented to occur within the vicinity of Garden Grove, approximately 3 miles northwest of the proposed project site (CDFW 2013). This species is thought to be non-colonial and individuals are known to roost in trees, hanging from the underside of a leaf (Pierson and Rainey 1998). Activity of this species has been observed year round throughout its range. The ornamental trees (i.e., palms) within the project area have the potential to support roosting bats. Although there is a high level of human activity within the project area during most hours of the day (classes beginning as early as 7:30 am and ending as late as 10:30 pm), western yellow bats are known to occur in urban and residential areas. Additionally, there is a water source approximately 500 feet west of the project area. The portion of Greer Park south of McFadden Avenue and west of Goldenwest Street contains a man-made lake that has the potential to provide suitable foraging habitat for this species.

It is recommended that preconstruction survey or acoustic bat survey be conducted by a qualified biologist no earlier than 30 days prior to the commencement of construction activities to determine if active bat roosts are present on or within 300 feet of the proposed construction activities. Construction activities should avoid removing identified bat roost trees. If trees must be removed, it is recommended that these trees be removed when the bats are not roosting and between August 1 and March 31 to avoid the breeding season for western yellow bats. Cosmetic removal/trimming of dead palm fronds is the primary conservation threat to this species and should be avoided in areas where this species is known to occur. The use of pesticides should be prohibited within areas identified to have active bat roosts. Impacts to this species would be less than significant with the implementation of the above measures.

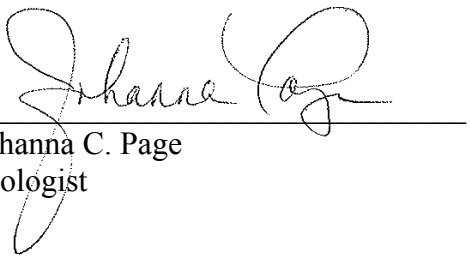
Trees

Implementation of the proposed project may result in removal, planting, and/or maintenance of trees protected under the Huntington Beach Municipal Code. Chapter 13.50 of the City's Municipal Code provides the regulation for trees growing in public places (City of Huntington

Beach 2002). As such, the District should coordinate with the City's Director of Public Works to obtain necessary permits from the City of Huntington Beach prior to planting, replanting, relocating, removing, spraying, and/or maintaining (e.g., prune or fertilize) any trees associated with the proposed project.

If you have any questions regarding this report, please contact me via telephone at 661.705.8613 or via email at jpage@dudek.com.

Sincerely,



Johanna C. Page
Biologist

Att.: Figures 1–4
Appendix A, List of Vascular Plant and Wildlife Species Observed Within the Project Boundary
Appendix B, Matrix of Special-Status Plant Species and Potential to Occur
Appendix C, Matrix of Vascular Wildlife Species and Potential to Occur

cc: Mr. Jerry Marchbank, Coast Community College District, Facilities Division
Rachel Struglia, Dudek
Caitlin Munson, Dudek

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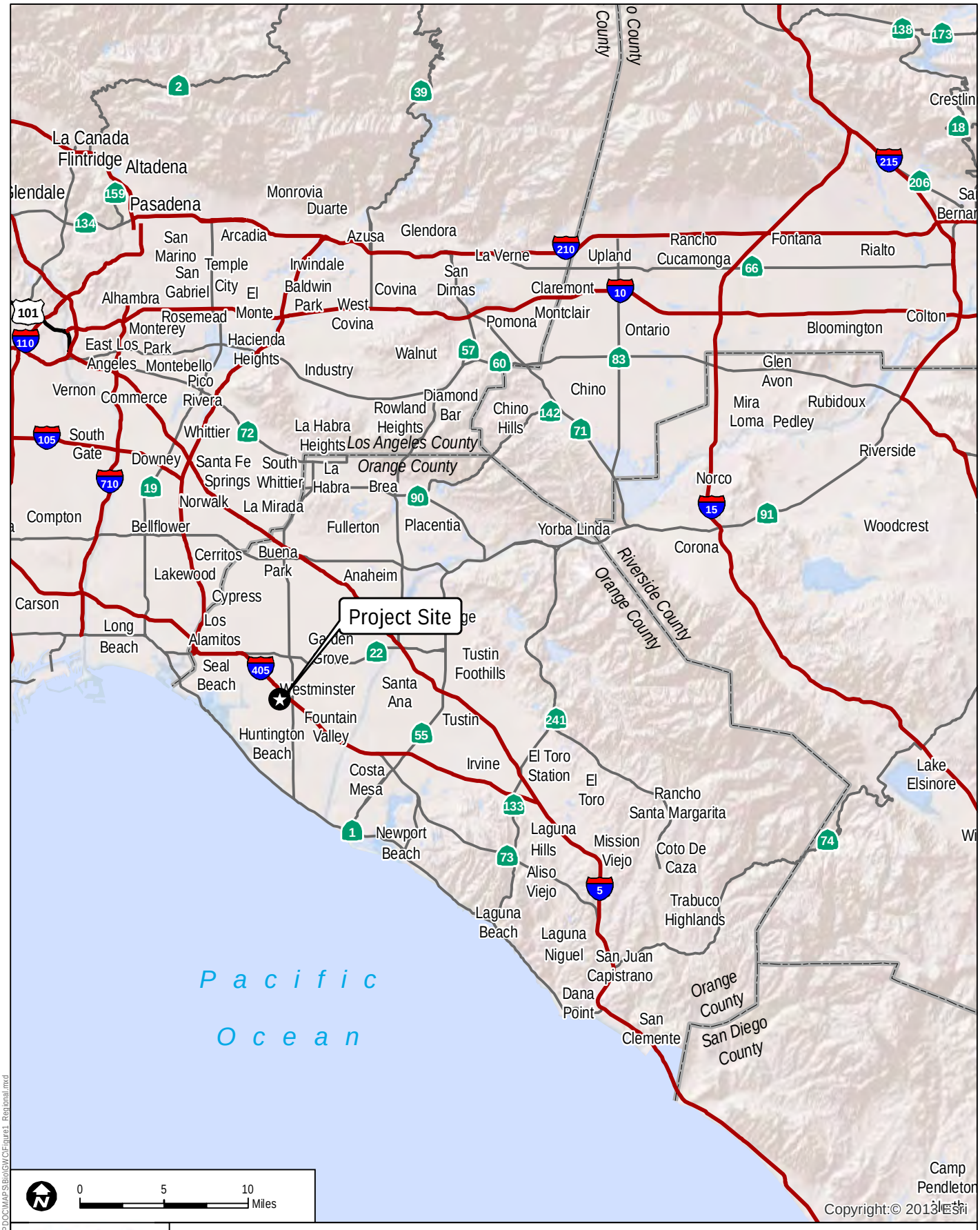


SOURCE: ESRI 2013

FIGURE 1

Regional Location

GOLDEN WEST COLLEGE VISION 2020 FACILITIES MASTER PLAN BIOLOGICAL RESOURCES LETTER REPORT

7910

Path: Z:\Projects\7910011\MAPDOC\MAPS\BioGWC\Figure1_Regional.mxd



SOURCE: ESRI 2013, Coast Community College Vision Plan 2012, SCAG 2008

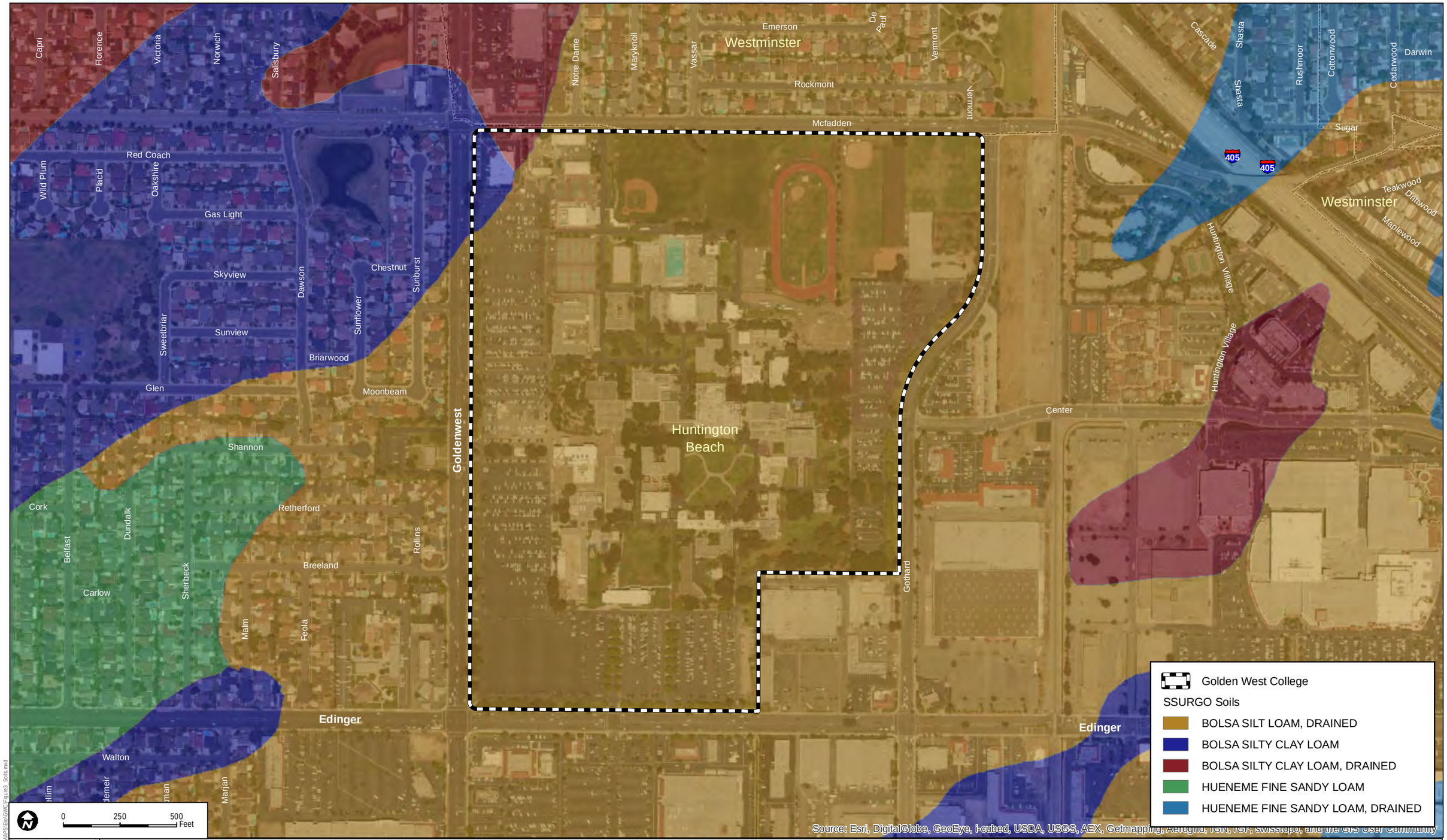
FIGURE 2

Local Vicinity

7910

GOLDEN WEST COLLEGE VISION 2020 FACILITIES MASTER PLAN BIOLOGICAL RESOURCES LETTER REPORT

Z:\Projects\7910\001\MAPDOC\MAPS\Bio\GWCBFigure2_Vicinity.mxd



SOURCE: ESRI 2013, Coast Community College Vision Plan 2012, Dept. fo Conservation 2010

FIGURE 3

Soils Map

7910

GOLDEN WEST COLLEGE VISION 2020 FACILITIES MASTER PLAN BIOLOGICAL RESOURCES LETTER REPORT

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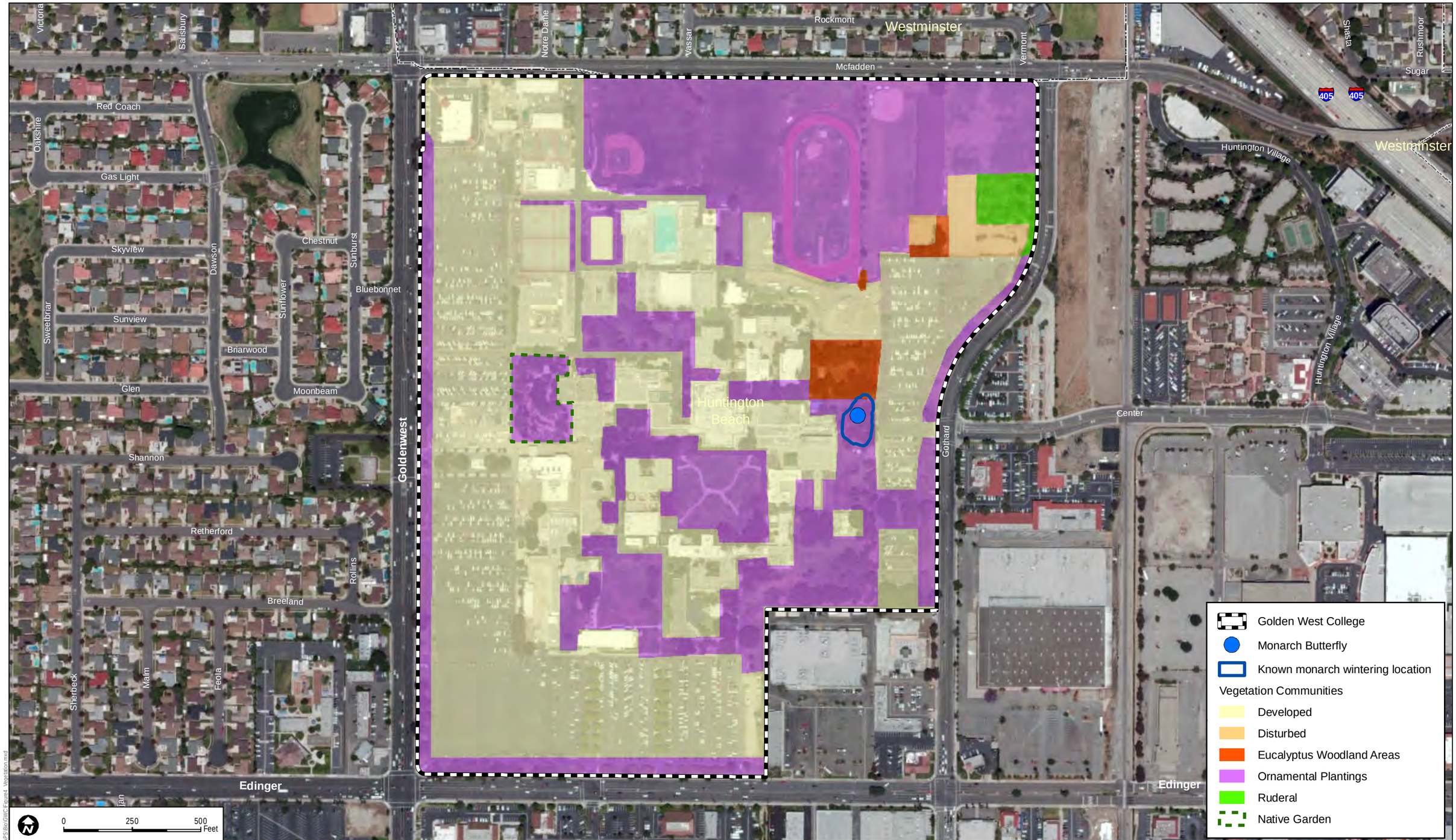

SOURCE: ESRI 2013, Coast Community College Vision Plan 2012, The Monarch Program (digitized wintering location)

FIGURE 4

Vegetation Map

7910

GOLDEN WEST COLLEGE VISION 2020 FACILITIES MASTER PLAN BIOLOGICAL RESOURCES LETTER REPORT

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APPENDIX A

List of Vascular Plant and Wildlife Species Observed Within the Project Boundary

Appendix A
List of Vascular Plant and Wildlife Species Observed Within the Project Boundary

VASCULAR PLANT SPECIES

GYMNOSPERMS

***GINKGOACEAE* – GINKGO FAMILY**

* *Ginkgo biloba* – maidenhair tree

***PINACEAE* – PINE FAMILY**

Pinus sp. – pine sp.

ANGIOSPERMS (DICOTS)

***AIZOACEAE* – FIG-MARIGOLD FAMILY**

* *Carpobrotus* sp. – iceplant

***ANACARDIACEAE* – SUMAC FAMILY**

Malosma laurina – laurel sumac

* *Schinus molle* – Peruvian peppertree

***ASTERACEAE* – SUNFLOWER FAMILY**

Erigeron canadensis – Canadian horseweed

***BIGNONIACEAE* – BIGNONIA FAMILY**

Chilopsis linearis – desert willow

* *Jacaranda mimosifolia* – blue jacaranda

***BRASSICACEAE* – MUSTARD FAMILY**

* *Brassica nigra* – black mustard

***CHENOPODIACEAE* – GOOSEFOOT FAMILY**

* *Salsola tragus* – prickly Russian thistle

***CLEOMACEAE* – CLEOME FAMILY**

Peritoma arbórea – bladderpod spiderflower

***CRASSULACEAE* – STONECROP FAMILY**

Dudleya pulverulenta – chalk dudleya

***CUPRESSACEAE* – CYPRESS FAMILY**

* *Cupressus sempervirens* – Italian cypress

Hesperocyparis forbesii – Tecate cypress

***FABACEAE* – LEGUME FAMILY**

* *Bauhinia variegata* – mountain ebony
* *Melilotus albus* – yellow sweetclover

***FAGACEAE* – OAK FAMILY**

Quercus agrifolia – California live oak
Quercus berberidifolia – scrub oak
Quercus engelmannii – Engelmann oak
Quercus wislizeni – interior live oak

***GERANIACEAE* – GERANIUM FAMILY**

* *Erodium* spp. – filaree

***GROSSULARIACEAE* – GOOSEBERRY FAMILY**

Ribes speciosum – fuchsiaflower gooseberry

***HAMAMELIDACEAE* – WITCH-HAZEL FAMILY**

* *Liquidambar styraciflua* - sweetgum

***LAMIACEAE* – MINT FAMILY**

Salvia apiana – white sage
Salvia leucophylla – purple sage
Salvia munzii – Munz's sage
Salvia spathacea – hummingbird sage

***LAURACEAE* – LAUREL FAMILY**

* *Persea americana* – avocado

***MAGNOLIACEAE* – MAGNOLIA FAMILY**

* *Liriodendron tulipifera* – tuliptree
* *Magnolia grandiflora* – southern magnolia

***MORACEAE* – FIG FAMILY**

* *Ficus* sp. – fig tree

***MUSACEAE* – BANANA FAMILY**

* *Musa* sp. – banana

***MYRTACEAE* – MYRTLE FAMILY**

* *Eucalyptus sp.* – eucalyptus sp.
* *Callistemon viminalis* – weeping bottlebrush.

***ONAGRACEAE* – EVENING PRIMROSE FAMILY**

Clarkia unguiculata – elegant clarkia

***PAPAVERACEAE* – POPPY FAMILY**

Eschscholzia californica – California poppy

Romneya coulteri – Coulter's matilija poppy

***PLHRYMACEAE* – LOPSEED FAMILY**

Mimulus cardinalis—scarlet monkeyflower

***PLANTAGINACEAE* – PLANTAIN FAMILY**

Collinsia heterophylla – purple Chinese houses

***PLATANACEAE* – SYCAMORE FAMILY**

Platanus racemosa – California sycamore

***PODOCARPACEAE* – PODOCARP FAMILY**

* *Podocarpus gracilior – fern pine*

***POLYGONACEAE* – BUCKWHEAT FAMILY**

Eriogonum crocatum – conejo buckwheat

***RHAMNACEAE* – BUCKTHORN FAMILY**

Ceanothus megacarpus – bigpod ceanothus

Ceanothus thyrsiflorus – blueblossom

***SALICACEAE* – WILLOW FAMILY**

* *Salix babylonica* – weeping willow

***SAPINDACEAE* – SOAPBERRY FAMILY**

* *Cupaniopsis anacardioides* – carrotwood

***ULMACEAE* – ELM FAMILY**

* *Ulmus parviflora* – Chinese elm

***VITACEAE* – GRAPE FAMILY**

Vitis californica – California wild grape

ANGIOSPERMS (MONOCOTS)

ARECACEAE – PALM FAMILY

* *Phoenix roebelenii* – pygmy date palm

* *Syagrus romanzoffiana* – queen palm

AGAVACEAE – AGAVE FAMILY

Hesperoyucca whipplei – chaparral yucca

* *Syagrus romanzoffiana* – queen palm

IRIDACEAE – IRIS FAMILY

Sisyrinchium bellum – western blue-eyed grass

POACEAE – GRASS FAMILY

* *Bromus* spp. – brome spp.

WILDLIFE SPECIES – VERTEBRATES

BUTTERFLIES AND MOTHS

***NYMPHALIDAE* – BRUSH-FOOTED BUTTERFLIES**

Adelpha californica – California sister

Danaus plexippus – monarch

***PAPILIONIDAE* – SWALLOWTAILS**

Papilio sp. – swallowtail

***PIERIDAE* – WHITES AND SULFURS**

Colias eurydice – California dogface

REPTILES

***IGUANIDAE* – IGUANID LIZARDS**

Sceloporus occidentalis – western fence lizard

BIRDS

***COLUMBIDAE* – PIGEONS AND DOVES**

Zenaida macroura – mourning dove

***CORVIDAE* – JAYS AND CROWS**

Corvus brachyrhynchos – American crow

***FRINGILLIDAE* – FINCHES**

Carpodacus mexicanus – house finch

Spinus psaltria – lesser goldfinch

***HIRUNDINIDAE* – SWALLOWS**

Tachycineta thalassina – violet-green swallow

***PASSERIDAE* – OLD WORLD SPARROWS**

* *Passer domesticus* – house sparrow

***PICIDAE* – WOODPECKER AND ALLIES**

Picoides nuttallii – Nuttall's woodpecker

***TROCHILIDAE* – HUMMINGBIRDS**

Calypte anna – Anna's hummingbird

***TROGLODYTIDAE* – WRENS**

Troglodytes aedon – house wren

***TYRANNIDAE* – TYRANT FLYCATCHERS**

Sayornis nigricans – black phoebe

* signifies introduced (non-native) species

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APPENDIX B

Matrix of Vascular Plant Species and Potential to Occur

Appendix B
Matrix of Vascular Plant Species and Potential to Occur

Scientific Name	Common Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Abronia villosa var. *aurita*	chaparral sand-verbena	None/ None/ 1B.1	Chaparral, Coastal scrub, Desert dunes/sandy/ annual herb/ Jan-Sep/ 246-5249	Not expected to occur. The elevation at the project site ranges from 25 to 40 feet above mean sea level (AMSL), well outside of the species' known elevation range.
Aphanisma blitoides	aphanisma	None/ None/ 1B.2	Coastal bluff scrub, Coastal dunes, Coastal scrub/sandy/ annual herb/ Mar-Jun/ 3-1001	Not expected to occur. No suitable habitat present within the proposed project site. No CNDDB occurrences within 10 miles of the proposed project site (CDFW 2013).
Astragalus pycnostachyus var. *lanosissimus*	Ventura marsh milk-vetch	FE/ SE/ 1B.1	Coastal dunes, Coastal scrub, Marshes and swamps (edges, coastal salt or brackish)/ perennial herb/ Jun-Oct/ 3-115	Not expected to occur. No suitable habitat on site. No CNDDB occurrences within 5 miles of the proposed project site (CDFW 2013).
Atriplex coulteri	Coulter's saltbush	None/ None/ 1B.2	Coastal bluff scrub, Coastal dunes, Coastal scrub, Valley and foothill grassland/alkaline or clay/ perennial herb/ Mar-Oct/ 10-1509	Low potential to occur. Although soils on site are suitable (i.e., moderately alkaline), there is only one location where this plant could occur naturally (a small ruderal field at the northwestern portion of the campus). This perennial plant was not observed during the survey; however the ruderal area was fenced in and only assessable via a binocular survey. The closest documentation of this species is 10 miles southeast of the proposed project site at Upper Newport Bay (CDFW 2013); however, there was no confirmation of this species within this location. This species occurrence was documented within a nonspecific area that was mapped based on plant habitat requirements and historic occurrence of the species within the area (CDFW 2013). Other occurrences in Newport Bay date back to 1932 and were observed within coastal plains and basins not present within the project area; therefore, likelihood is low.
Atriplex pacifica	South Coast saltscale	None/ None/ 1B.2	Coastal bluff scrub, Coastal dunes, Coastal scrub, Playas/ annual herb/ Mar-Oct/ 0-459	Not expected to occur. The project site is within the known geographic and elevational range for this species; however, this species is known to occur within coastal bluff scrub and coastal scrub not present on site (Jepson Flora 2013; CDFW 2013). There are no species occurrences within 10 miles of the project site (Jepson 2013; CDFW 2013).

Scientific Name	Common Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Atriplex parishii	Parish's brittlescale	None/ None/ 1B.1	Chenopod scrub, Playas, Vernal pools/alkaline/ annual herb/ Jun-Oct/ 82-6234	Not expected to occur. The project site is outside of the known elevational range for this species. Additionally, this species is known to occur within playas, chenopod scrub, and in vernal pools (Jepson Flora 2013; CNPS 2013). Suitable habitat does not occur on the project site.
Atriplex serenana var. *davidsonii*	Davidson's saltscale	None/ None/ 1B.2	Coastal bluff scrub, Coastal scrub/alkaline/ annual herb/ Apr-Oct/ 33-656	Low potential to occur. The project site is within the known geographic and elevational range for this species; however, this species is known to occur within or adjacent to coastal bluff scrub and coastal scrub, which does not exist on site. The closest known occurrence is approximately 4 miles west of the project area within the Seal Beach Naval Weapons Station (Jepson Flora 2013; CDFW 2013). Although species occurrences are near the project site, suitable habitat does not occur on the project site, thus low potential to occur.
Calochortus weedii var. *intermedius*	intermediate mariposa lily	None/ None/ 1B.2	Chaparral, Coastal scrub, Valley and foothill grassland/rocky, calcareous/ perennial bulbiferous herb/ May-Jul/ 344-2805	Not expected to occur. Suitable habitat for this species (i.e., dry, rocky, open slopes) is not present within the project site and the elevation at the project site ranges from 25 to 40 feet AMSL, well outside of the species' known elevation range. The closest occurrence is approximately 15 miles southeast of the project site within oak woodland habitat in Arroyo Trabuco.
Camissoniopsis lewisii	Lewis' evening-primrose	None/ None/ 3	Coastal bluff scrub, Cismontane woodland, Coastal dunes, Coastal scrub, Valley and foothill grassland/sandy or clay/ annual herb/ Mar-May(Jun),/ 0-984	Low potential to occur. The project site is within the known geographic and elevational range for this species. The closest known occurrence dates back to 1932 and is approximately 12 miles southeast of the project site within Penninsula Park (Jepson Flora 2013). There are no species occurrences occur near the project site and habitat is limited and disturbed within the project area; therefore, likelihood of occurrence is low.
Centromadia parryi ssp. *australis*	southern tarplant	None/ None/ 1B.1	Marshes and swamps (margins), Valley and foothill grassland (vernally mesic), Vernal pools/ annual herb/ May-Nov/ 0-1394	Low potential to occur. Project site is within known geographic and elevational range for species, and the project site is located within 5 miles of known occurrences of the species. The closest species occurrence is 0.75 mile

Scientific Name	Common Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
				north of project area within a weedy alkali field; however, this species is known to occur within and immediately adjacent to salt marshes, floodplains, wetlands, and waterways (Jepson Flora 2013; CDFW 2013). Although there are species occurrences observed near the project site, no vernally mesic habitat exists on site; therefore, potential to occur is low.
Chaenactis glabriuscula var. *orcuttiana*	Orcutt's pincushion	None/ None/ 1B.1	Coastal bluff scrub (sandy), Coastal dunes/ annual herb/ Jan-Aug/ 0-328	Not expected to occur. Project site within known geographical and elevational range for this species; however, this species is known to occur within or adjacent to coastal bluff scrub and coastal dunes. This habitat does not occur on the project site. Additionally, the closest known occurrence is approximately 20 miles southeast of the project site in Laguna Beach along the coastline (Jepson Flora 2013; CDFW 2013).
Chloropyron maritimum ssp. *maritimum*	salt marsh bird's-beak	FE/ SE/ 1B.2	Coastal dunes, Marshes and swamps (coastal salt)/ annual herb hemiparasitic/ May-Oct/ 0-98	Not expected to occur. This species is associated with coastal dunes and marshes. This habitat is not present within the project site. Closest occurrence is approximately 3 miles southeast and east of the project site within coastal salt marsh at Bolsa Chica Ecological Reserve and Upper Anaheim Bay at Seal Beach along the coast (CDFW 2013). Although the project site is located within known geographical and elevational range, the habitat on site is not suitable.
Chorizanthe parryi var. *fernandina*	San Fernando Valley spineflower	FC/ SE/ 1B.1	Coastal scrub(sandy), Valley and foothill grassland/ annual herb/ Apr-Jul/ 492-4003	Not expected to occur. The site is outside of the species' known elevation range and the limited ruderal grassland vegetation present on the project site is disturbed.
Comarostaphylis diversifolia ssp. *diversifolia*	summer holly	None/ None/ 1B.2	Chaparral, Cismontane woodland/ perennial evergreen shrub/ Apr-Jun/ 98-2592	Low potential to occur. This perennial plant was not observed during the survey; however the ruderal area mapped along the northwestern portion of the campus was fenced in and only assessable via a binocular survey. No suitable habitat (e.g., chaparral and cismontane woodland) present within the project area. Closest known occurrence is approximately 25 miles

Scientific Name	Common Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
				southeast of the proposed project site within Moulton Meadows Park (Jepson Flora 2013). Low potential to occur onsite unless planted as an ornamental.
Dudleya multicaulis	many-stemmed dudleya	None/ None/ 1B.2	Chaparral, Coastal scrub, Valley and foothill grassland/often clay/ perennial herb/ Apr-Jul/ 49-2592	Low potential to occur. This perennial plant was not observed during the survey; however the ruderal area mapped along the northwestern portion of the campus was fenced in and only assessable via a binocular survey. Elevation range on site is between 25 to 40 feet AMSL, which is just outside of the species' known elevation range. Additionally, soils within the project area are silt loam, not typically associated with this species. Therefore, likelihood of occurrence within the project site is low.
Dudleya stolonifera	Laguna Beach dudleya	FT/ ST/ 1B.1	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland/rocky/ perennial stoloniferous herb/ May-Jul/ 33-853	Low potential to occur. This perennial plant was not observed during the survey. The ruderal area mapped along the northwestern portion of the campus was fenced in and only assessable via a binocular survey; however, there are only six occurrences for this species, all on north-facing sandstone surfaces in steep-walled canyons near Laguna Beach (USFWS 2010). The closest occurrence is 21 miles southeast of the project site within Laguna Canyon (CDFW 2013; Jepson 2013). The project site lacks steep and rugged habitat (e.g., rock outcrops and canyon walls) typically associated with this species (USFWS 2010), thus likelihood of occurrence within the project site is low.
Eriastrum densifolium ssp. *sanctorum*	Santa Ana River woollystar	FE/ SE/ 1B.1	Chaparral, Coastal scrub (alluvial fan)/sandy or gravelly/ perennial herb/ Apr-Sep/ 299-2001	Not expected to occur. Although soils are suitable to support this species, the site is outside of the species' known elevation range and there is no suitable vegetation present.
Eryngium aristulatum var. *parishii*	San Diego button-celery	FE/ SE/ 1B.1	Coastal scrub, Valley and foothill grassland, Vernal pools/mesic/ annual/perennial herb/ Apr-Jun/ 66-2034	Not expected to occur. The project site is outside of the geographic and elevational range for this species. Mesic habitat does not occur within the proposed project area.
Euphorbia misera	cliff spurge	None/ None/ 2.2	Coastal bluff scrub, Coastal scrub, Mojavean desert scrub/rocky/ perennial shrub/ Dec-Aug/ 33-1640	Not expected to occur. This perennial plant was not observed during the survey. Although the ruderal area mapped along the northwestern portion of the campus

Scientific Name	Common Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
				was fenced in and only assessable via a binocular survey, Jepson (2013) shows this species as occurring within rocky slopes and coastal bluff habitat not present within the project area. Additionally, the closest known occurrence is over 14 miles southeast of the project area within sandy ocean bluff (CDFW 2013), thus this species is not expected to occur.
Helianthus nuttallii ssp. *parishii*	Los Angeles sunflower	None/ None/ 1A	Marshes and swamps (coastal salt and freshwater)/ perennial rhizomatous herb/ Aug-Oct/ 33-5495	Low potential to occur. Project site just outside of the known elevational range of species. The closest documented occurrence is approximately 0.8 mile southeast of the project area and dates back to 1924 (CDFW 2013). Jepson Flora (2013) shows this species as occurring within coastal plains and basins within Newport Lagoon and the Los Angeles Basin. Although species is near project site, suitable habitat (i.e., marshes and swamps) does not occur within the project site, thus low potential for occurrence.
Hordeum intercedens	vernal barley	None/ None/ 3.2	Coastal dunes, Coastal scrub, Valley and foothill grassland (saline flats and depressions), Vernal pools/ annual herb/ Mar-Jun/ 16-3281	Low potential to occur. Project site within known elevational range of species. The closest known occurrence is near Corona del Mar, approximately 14 miles southeast of the proposed project (Jepson Flora 2013). Jepson (2013) shows this species as occurring within vernal pools, dry, saline streambeds and alkaline flats. Although species is near the project site, suitable habitat (i.e., coastal dunes, coastal scrub, and vernal pools) does not occur within the project site, thus low potential for occurrence.
Horkelia cuneata var. *puberula*	mesa horkelia	None/ None/ 1B.1	Chaparral (maritime), Cismontane woodland, Coastal scrub/sandy or gravelly/ perennial herb/ Feb-Jul (Sep),/ 230-2657	Not expected to occur. The site is outside of the species' known elevation range and there is no suitable vegetation present.
Isocoma menziesii var. *decumbens*	decumbent goldenbush	None/ None/ 1B.2	Chaparral, Coastal scrub (sandy, often in disturbed areas)/ perennial shrub/ Apr-Nov/ 33-443	Low potential to occur. This perennial plant was not observed during the survey; however, the ruderal area mapped along the northwestern portion of the campus was fenced in and only assessable via a binocular survey. Suitable sandy soils are not present within the project area. There is a single regional occurrence

Scientific Name	Common Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
				documented for this species within coastal bluffs of the Pacific Ocean drainage area, dating back to 1946 (Jepson Flora 2013). Suitable habitat is not present within the project area.
Lasthenia glabrata ssp. *coulteri*	Coulter's goldfields	None/ None/ 1B.1	Marshes and swamps (coastal salt), Playas, Vernal pools/ annual herb/ Feb-Jun/ 3-4003	Low potential to occur. This species is associated with alkali flats typical of marshes and swamps, playas, and vernal pools. Suitable soils and habitat are not present within the project site. There is a known occurrence within 2 miles of the project site within coastal saline marshes (CDFW 2013). Although the project site is located within the species' known geographical and elevational range, there is no suitable habitat (i.e., saline places or vernal pools) on site; therefore, potential for occurrence is low.
Lepidium virginicum var. *robinsonii*	Robinson's pepper-grass	None/ None/ 1B.2	Chaparral, Coastal scrub/ annual herb/ Jan-Jul/ 3-2904	Low potential to occur. Project site within known elevational range of species. The closest known occurrence is within an open space preserve near UC Irvine, approximately 12 miles southeast of the proposed project (Jepson Flora 2013; CDFW 2013). Jepson (2013) shows this species as occurring within coastal sage scrub. Although this species has been recorded near the project site, suitable habitat (i.e., coastal scrub and chaparral) does not occur within the project site, thus low potential for occurrence.
Nama stenocarpum	mud nama	None/ None/ 2.2	Marshes and swamps (lake margins, riverbanks)/ annual/perennial herb/ Jan-Jul/ 16-1640	Low potential to occur. This species is associated with marshes and swamps, which do not occur on site. The closest known occurrence is 4 miles west of the project area within a marsh area near Anaheim Bay (CNDDB 2013). Although the project site is located within the species' known geographical and elevational range, the habitat on site is not appropriate; therefore, potential for occurrence is low.
Nasturtium gambelii	Gambel's water cress	FE/ ST/ 1B.1	Marshes and swamps (freshwater or brackish)/ perennial rhizomatous herb/ Apr-Oct/ 16-1083	Not expected to occur. This perennial plant was not observed during the survey. Even though the ruderal area mapped along the northwestern portion of the campus was

Scientific Name	Common Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
				fenced in and only assessable via a binocular survey, Jepson (2013) shows this species as occurring within marshes, streambanks, and lake margins which do not occur within the project area. Although species is near the project site, suitable aquatic habitat does not occur within the project site, thus this species is not anticipated to occur within the project area.
Navarretia prostrata	prostrate vernal pool navarretia	None/ None/ 1B.1	Coastal scrub, Meadows and seeps, Valley and foothill grassland (alkaline), Vernal pools/Mesic/ annual herb/ Apr-Jul/ 49-3970	Low potential to occur. This species is associated with vernal pools and moist environments. There is a species occurrence associated with the bottom of a vernal pool at Fairview Park, approximately 6 miles southeast of the proposed project site (CDFW 2013). The project site is just outside of the species' known elevational range and suitable mesic habitat (e.g., coastal scrub or meadows and seeps) does not occur within the project site, thus low potential for occurrence.
Nemacaulis denudata var. *denudata*	coast woolly-heads	None/ None/ 1B.2	Coastal dunes/ annual herb/ Apr-Sep/ 0-328	Not expected to occur. No suitable coastal dune habitat present within the project area. All species occurrences are documented along the coastline.
Orcuttia californica	California Orcutt grass	FE/ SE/ 1B.1	Vernal pools/ annual herb/ Apr-Aug/ 49-2165	Not expected to occur. This species is associated with vernal pools and is outside of the known geographical range of the species (approximately 25 miles northwest of the project site) (Jepson 2013).
Pentachaeta aurea ssp. *allenii*	Allen's pentachaeta	None/ None/ 1B.1	Coastal scrub (openings), Valley and foothill grassland/ annual herb/ Mar-Jun/ 246-1706	Not expected to occur. The elevation at the project site ranges in elevation from 25 to 40 feet AMSL, which is well outside of the species' known elevation range.
Pentachaeta lyonii	Lyon's pentachaeta	FE/ SE/ 1B.1	Chaparral (openings), Coastal scrub, Valley and foothill grassland/rocky, clay/ annual herb/ Mar-Aug/ 98-2067	Low potential to occur. Suitable soils exist within the project area, though there are no documented occurrences within the project area or Orange County (Jepson 2013). Elevation range on site is between 25 to 40 feet AMSL and is outside of the species' known elevation range. Although suitable soils exist within the project area, the project area is outside of the species' known elevational range and there are no known occurrences within 25 miles; therefore, potential for occurrence is low.

Scientific Name	Common Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Phacelia ramosissima var. *austrolitoralis*	south coast branching phacelia	None/ None/ 3.2	Chaparral, Coastal dunes, Coastal scrub, Marshes and swamps(coastal salt)/sandy, sometimes rocky/ perennial herb/ Mar-Aug/ 16-984	Low potential to occur. Project site within known elevational range of species and suitable soils are present on site; however, this perennial plant was not observed during the survey. Even though the ruderal area mapped along the northwestern portion of the campus was fenced in and only assessable via a binocular survey, Jepson (2013) shows this species as occurring within chaparral, coastal dunes, coastal scrub or coastal salt marsh, which do not occur within the project area. Although these is a known occurrence of this species near the project site, suitable habitat does not occur within the project site, thus potential for occurrence is low.
Quercus dumosa	Nuttall's scrub oak	None/ None/ 1B.1	Closed-cone coniferous forest, Chaparral, Coastal scrub/sandy, clay loam/ perennial evergreen shrub/ Feb-Apr(Aug),/ 49-1312	Not expected to occur. Coniferous trees within the project area are landscaped ornamental trees. No suitable natural habitat (i.e., coniferous forest, chaparral, or coastal scrub) present on the proposed project site. This perennial evergreen shrub would have been observed during the survey if present. The project site is just outside of the species' known elevational range.
Sagittaria sanfordii	Sanford's arrowhead	None/ None/ 1B.2	Marshes and swamps(assorted shallow freshwater)/ perennial rhizomatous herb emergent/ May-Oct/ 0-2133	Not expected to occur. This species is associated with shallow freshwater marshes and swamps, which do not occur on site, and is outside of the known geographical range of the species (approximately 25 miles northeast of project site) (Jepson 2013).
Senecio aphanactis	chaparral ragwort	None/ None/ 2.2	Chaparral, cismontane woodland, coastal scrub/sometimes alkaline/ annual herb/ Jan-Apr/ 49-2625	Low potential to occur. The project site is just outside of the known elevational range of this species. The species is associated with alkaline soils which are present on site; however, there is no suitable vegetation present within the proposed project area. The closest known occurrence is within the UC Irvine Ecological Reserve, over 12 miles southeast of the proposed project (Jepson Flora 2013).
Sidalcea neomexicana	salt spring checkerbloom	None/ None/ 2.2	Alkali playas, brackish marshes, chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub/alkaline, mesic/ perennial	Low potential to occur. This species is generally associated with mesic, alkaline areas in playas, marshes, chaparral, coastal scrub, lower montane

Scientific Name	Common Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
			herb/ Mar-Jun/ 49-5020	coniferous forest, and Mojavean desert scrub, which do not occur on site. Although the project site is located within the species' known geographical range, it is just outside of the elevational range for this species and there is no suitable habitat on site; therefore, potential for occurrence is low.
Suaeda californica	California seablite	FE/ None/ 1B.1	Marshes and swamps (coastal salt)/ perennial evergreen shrub/ Jul-Oct/ 0-49	Not expected to occur. This perennial plant was not observed during the survey. Even though the ruderal area mapped along the northwestern portion of the campus was fenced in and only assessable via a binocular survey, Jepson (2013) shows this species as occurring within marshes and swamps which do not occur within the project area. Suitable habitat is not present within the proposed project site and the nearest known occurrence is 13 miles southeast from the project site in Balboa Beach. Therefore, this species is not expected to occur within the project area.
Suaeda esteroa	estuary seablite	None/ None/ 1B.2	Marshes and swamps(coastal salt)/ perennial herb/ May-Oct(Jan),/ 0-16	Not expected to occur. This perennial plant was not observed during the survey. This species is associated with marshes and swamps. Suitable habitat not present within the proposed project site.
Symphyotrichum defoliatum	San Bernardino aster	None/ None/ 1B.2	Cismontane woodland, coastal scrub, Lower montane coniferous forest, Meadows and seeps, Marshes and swamps, Valley and foothill grassland(vernally mesic) /near ditches, streams, springs/ perennial rhizomatous herb/ Jul-Nov/ 7-6693	Low potential to occur. This species is associated with ditches, streams, and springs. Suitable habitat not present within the proposed project site. The closest known extant occurrence was documented 3.25 miles within marsh habitat in the vicinity of Huntington Harbor (CDFW 2013). Although the project site is within the species' known elevational range, no suitable water sources exist within the project area.
Verbesina dissita	big-leaved crownbeard	FT/ ST/ 1B.1	Chaparral(maritime), Coastal scrub/ perennial herb/ Apr-Jul/ 148-673	Not expected to occur. Elevation range on site is between 25 to 40 feet AMSL and is well outside of the species' known elevation range. Additionally, no suitable chaparral or coastal scrub occurs on the proposed project site.

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APPENDIX C

Matrix of Vascular Wildlife Species and Potential to Occur

Appendix C
Matrix of Vascular Wildlife Species and Potential to Occur

Scientific Name	Common Name	Status Federal/ State	Primary Habitat Associations	Potential to Occur
		Amphibians		
Spea [=*Scaphiopus*] *hammondi*	Western spadefoot	None/ CSC	Most common in grasslands, coastal sage scrub near rain pools or vernal pools; riparian habitat	Absent. No suitable water sources within the project area. No CNDDB occurrences within 5 miles of the proposed project site (CDFW 2013).
		Reptiles		
Actinemys [=*Emys*] *marmorata pallida*	Southwestern pond turtle	None/ CSC	Slow-moving permanent or intermittent streams, ponds, small lakes, reservoirs with emergent basking sites; adjacent uplands used during winter	Absent. Project area lacks suitable water source and acquatic habitat required by this species. No CNDDB occurrence within 5 miles of proposed project site (CDFW 2013).
Aspidoscelis hyperythra [=*Cnemidophorus hyperythrus*]	Orange-throated whiptail	None/ CSC	Coastal sage scrub, chaparral, grassland, juniper and oak woodland	Absent. Lack of suitable habitat within the proposed project area and adjacent areas. No CNDDB occurrences within 5 miles of the proposed project site (CDFW 2013).
Charina [Lichanura] trivirgata rosseofusca	Coastal rosy boa	None/ None	Rocky chaparral, coastal sage scrub, oak woodlands, desert and semi-desert scrub; common in riparian areas	Absent. Lack of suitable habitat within the proposed project area and adjacent areas. No CNDDB occurrences within 5 miles of the proposed project site (CDFW 2013).
Chelonia mydas	Green turtle	FT/None	Warm marine waters near shorelines such as lagoons and bays with beds of eelgrass and seaweed;nests on sandy beaches	Absent. Lack of suitable marine habitat within the proposed project area. Closest marine waters are located 4.5 miles south of the proposed project site. No CNDDB occurrences within 5 miles of the proposed project site (CDFW 2013).
Crotalus ruber ruber	Northern red-diamond rattlesnake	None/ CSC	Variety of shrub habitats where there is heavy brush, large rocks, or boulders	Low. Limited suitable habitat present within the project site. No CNDDB occurrences within 5 miles of the proposed project site (CDFW 2013).

Scientific Name	Common Name	Status Federal/ State	Primary Habitat Associations	Potential to Occur
Diadophis punctatus modestus	San Bernardino ringneck snake	None/ None	Open, rocky and somewhat moist areas near intermittent streams: grasslands, sage scrub	Absent. No suitable moist areas or streams within the project area. No CNDDB occurrences within 5 miles of the proposed project site (CDFW 2013).
Phrynosoma coronatum (blainvillei population)	Coast (San Diego) horned lizard	None/ CSC	Coastal sage scrub, annual grassland, chaparral, oak and riparian woodland, coniferous forest	Absent. No suitable habitat present within the project site. No CNDDB occurrences within 5 miles of the proposed project site (CDFW 2013).
Birds				
Accipiter cooperii (nesting)	Cooper's hawk	None/ CSC	Riparian and oak woodlands, montane canyons	Moderate (nesting). Suitable habitat is limited to ornamental trees comprised of pine and eucalyptus on site.This species is known to occur in urban areas. No CNDDB occurrence within 5 miles of the proposed project area (CDFW 2013).
Agelaius tricolor	Tricolored blackbird	BCC, USBC/ CSC	Nests near fresh water, emergent wetland with cattails or tules; forages in grasslands, woodland, agriculture pastures, rice fields, feedlots, dairies , and occasionally riparian scrub and marsh borders	Low. Proposed project site lacks suitable aquatic sources and emergent wetland vegetation required for nesting. Suitable foraging potential within the proposed project area is extremely limited. No CNDDB occurrences within 5 miles of the proposed project site (CDFW 2013).
Aimophila ruficeps canescens (nesting and foraging)	Southern California rufous-crowned sparrow	None/ CSC	Grass-covered hillsides, coastal sage scrub, chaparral with boulders and outcrops	Low (nesting and foraging). Lack of suitable nesting and foraging habitat within the proposed project site. No CNDDB occurrences within 5 miles of the proposed project site (CDFW 2013).
Ammodramus savannarum	Grasshopper sparrow	None/CSC	Dense, dry or well-drained annual and native grasslands with mix of grasses and forbs; fallow agricultural fields	Low. Lack of suitable nesting and foraging habitat within the proposed project site. No CNDDB occurrence within 5 miles of theproposed project site (CDFW 2013).

Scientific Name	Common Name	Status Federal/ State	Primary Habitat Associations	Potential to Occur
Ardea herodias (rookery)	Great blue heron	None/ None	Variety of habitats, but primarily wetlands; lakes, rivers, marshes, mudflats, estuaries, saltmarsh, riparian habitats	Absent. No suitable water sources within the project area. No CNDDB occurrences within 5 miles of the proposed project site (CDFW 2013).
Athene cunicularia (burrow sites and some wintering sites)	Burrowing owl	BCC/ CSC	Grassland, lowland scrub, agriculture, coastal dunes and other artificial open areas	Low. No burrows or suitable habitat to support this species observed during the field visit. Although, a small ruderal area along the northeastern portion of the project site was not accessible during the site vist, this area was surveyed via a binocular survey. Habitat within this area was limited and disturbed. The closest CNDDB occurrence is approximately 2.7 miles west of the proposed project site at the Weapons Bunker within the Seal Beach Naval Weapons Station (CDFW 2013). Very few burrowing owls are known to occur in Orange County; mostly wintering birds. Project area is developed, with minimal habitat of poor quality, thus this species is unlikely to occur within the project area.
Buteo regalis (wintering)	Ferruginous hawk	BCC/ CSC	Open, dry country, grasslands, open fields, agriculture	Low. The ruderal area on site is only approximately 1 acre in size, and is not large enough to provide quality habitat for this species. This species was not observed during the site visit. Closest CNDDB occurrence is approximately 4.75 miles northeast of the proposed project site within ruderal vegation surrounding an air field (CDFW 2013).
Campylorhynchus brunneicapillus sandiegensis	Coastal (San Diego) cactus wren	BCC/ CSC	Southern cactus scrub, maritime succulent scrub, cactus thickets in coastal sage scrub	Absent. Lack of suitable habitat within the proposed project site or adjacent areas No CNDDB occurrences within 5 miles of the proposed project site (CDFW 2013).

Scientific Name	Common Name	Status Federal/ State	Primary Habitat Associations	Potential to Occur
Charadrius alexandrinus nivosus	Western snowy plover (coastal population)	FT, BCC, USBC/ CSC	Nests primarily on coastal beaches, in flat open areas, with sandy or saline substrates; less commonly in salt pans, dredged spoil disposal sites, dry salt ponds and levees	Absent. Lack of suitable aquatic habitat (e.g., coastal beaches or saline substrates) required for nesting within the proposed project area. No existing CNDDB occurrences within 5 miles of the proposed project site (CDFW 2013).
Coccyzus americanus occidentalis (nesting)	Western yellow-billed cuckoo	FC, BCC/ SE	Dense, wide riparian woodlands and forest with well-developed understories	Absent. Lack of suitable aquatic habitat required for nesting within the proposed project area. No CNDDB occurrences within 5 miles of the proposed project site (CDFW 2013).
Elanus leucurus (nesting)	White-tailed kite	None/ FP	Open grasslands, savanna-like habitats, agriculture, wetlands, oak woodlands, riparian	Low. Lack of sutiable open grassland habitat for foraging and riparin habitat suitable for nesting within the proposed project site and adjacent areas. No CNDDB occurrences within 5 miles of the proposed project site (CDFW 2013).
Eremophila alpestris actia	California horned lark	None/ CSC	Open habitats, grassland, rangeland, shortgrass prairie, montane meadows, coastal plains, fallow grain fields	Absent. Suitable open habitats required for nesting and foraging not present within the proposed project site or within adjacent areas. No CNDDB occurrences within 5 miles of the proposed project site (CDFW 2013).
Icteria virens (nesting)	Yellow-breasted chat	None/ CSC	Dense, relatively wide riparian woodlands and thickets of willows, vine tangles and dense brush.	Absent. Suitable aquatic habitat (e.g., riparian woodlands) required for nesting and foraging not present within the proposed project site or adjacent areas. No CNDDB occurrence within 5 miles of the proposed project site (CDFW 2013).
Laterallus jamaicensis coturniculus	California black rail	ST, BCC, USBC/ FP	Saline, brackish, and fresh emergent wetlands	Absent. Suitable aquatic habitat required for nesting and foraging not present within the proposed project site or adjacent areas. No CNDDB occurrences within 5 miles of the proposed project site (CDFW 2013).

Scientific Name	Common Name	Status Federal/ State	Primary Habitat Associations	Potential to Occur
Passerculus sandwichensis beldingi	Belding's savannah sparrow	None/ SE	Saltmarsh, pickleweed	Absent. Suitable aquatic wetland habitat required for nesting and foraging not present within the proposed project site or adjacent areas. CNDDB occurrences along the coastline approximately 2 to 3 miles from the proposed project site within the Bolsa Chica Wetlands, Seal Beach National Wildlife Refuge, and Huntington Harbor Sunset Aquatic Park (CDFW 2013).
Pelecanus occidentalis californicus (nesting colony and communal roosts)	California brown pelican	None/ CSC, FP	Open sea, large water bodies, coastal bays and harbors	Absent. Suitable aquatic habitat required for nesting and foraging not present within the proposed project site or adjacent areas. No CNDDB occurrences within 5 miles of the proposed project site (CDFW 2013).
Polioptila californica californica	Coastal California gnatcatcher	FT, USBC/ CSC	Coastal sage scrub, coastal sage scrub-chaparral mix, coastal sage scrub-grassland ecotone, riparian in late summer	Low. Suitable habitat (e.g., coastal sage scrub) required for nesting and foraging not present within the proposed project site or adjacent areas. Closest CNDDB occurrences are within coastal sage scurb and disturbed salt marsh habitat approximately 2.5 to 3.5 miles south and southwest of the project site. (CDFW 2013).
Rallus longirostris levipes	Light-footed clapper rail	FE, USBC/ SE, FP	Coastal saltmarsh	Absent. Suitable coastal saltmarsh habitat not present within the proposed project site or adjacent areas. CNDDB occurrences within 5 miles of the proposed project site along the coastline within southern coastal salt marsh habitat at Seal Beach National Wildlife Refuge and Bolsa Chica Ecological Reserve (CDFW 2013).

Scientific Name	Common Name	Status Federal/ State	Primary Habitat Associations	Potential to Occur
Riparia riparia (nesting)	Bank swallow	None/ ST	Typically occur along rivers, lakes, oceans, stream, and reservoirs with vertical banks or cliffs; nest in lowland country with soft banks or bluffs; mostly forage over water in riparian areas, various aquatic habitats, and wet croplads, occassionaly forage in neighboring brush	Absent. Lack of suitable aquatic habitats required for nesting and foraging within the proposed project area. No exsiting CNDDB occurrences within 5 miles of the proposed project site (CDFW 2013).
Rynchops niger (wintering)	Black skimmer	WL/CSC	Alkali playa; sand shore; beaches; estuarine sand bars	Low. Suitable habitat not present within the proposed project area. CNDDB occurrence along the coastline the Bolsa Chica Ecological Reserve approximately 4 miles southwest of the project site (CDFW 2013).
Sterna antillarum browni (nesting colony)	California least tern	FE, USBC/ SE, FP	Nests along the coast from San Francisco Bay south to northern Baja California	Low. Suitable habitat not present within the proposed project area. Closest CNDDB occurrence along the coastline approximately 4 miles southwest of the proposed project site within Bolsa Chica Ecological Reserve and Seal Beach National Wildliife Refuge (CDFW 2013).
Vireo bellii pusillus (nesting)	Least Bell's vireo	FE, BCC, USBC/ SE	Nests in southern willow scrub with dense cover within 1-2 meters of the ground; habitat includes willows, cottonwoods, baccharis, wild blackberry or mesquite on desert areas	Absent. Suitable aquatic habitat not present within the proposed project area. No CNDDB occurrences within 5 miles of the proposed project site (CDFW 2013).
Mammals				
Choeronycteris mexicana	Mexican long-tongued bat	None/ CSC	Desert and montane riparian, desert succulent scrub, desert scrub, and pinyon-juniper woodland; roosts in caves, mines, and buildings	Low. Lack of suitable foraging habitat present within the proposed project site. No CNDDB occurrences within 5 miles of the proposed project site (CDFW 2013).

Scientific Name	Common Name	Status Federal/ State	Primary Habitat Associations	Potential to Occur
Eumops perotis californicus	Western mastiff bat	None/ CSC	Open, semi-arid to arid habitats including, conifer and deciduous woodland, coastal scrub, annual and perennial grasslands, palm oases, chaparral, desert scrub, and urban; prefer low elevations in the coastal basins of southern California; generally roost in small colonies in cracks and small holes within rugged, rocky areas, also roost within man-made structures	Low. No suitable foraging habitat within the proposed project site.Ornamental trees within the project area could provide roosting habitat within the proposed project site. No CNDDB occurrences within 5 miles of the proposed project site (CDFW 2013).
Lasionycteris noctivagans	Silver-haired bat	None/ SA	Coastal and montane forest, roosts in hollow trees, beneath exfoliating bark, abandoned woodpecker holes, and rarely under rocks.	Low. Roost in cavities of living or dead trees. Suitable habitat is limited to ornamental trees within the proposed project site. No CNDDB occurrences within 5 miles of the proposed project (CDFW 2013).
Lasiurus cinereus	Hoary bat	None/ SA	Broad-leaved upland forest, cismontane woodland, lower montane coniferous forest, and north coast coniferous forest; usually roost at edge of coniferous and deciduous tree clearings; less commonly roost in cavities, caves, or man-made structures	Low. Suitable roosting habitat (e.g., trees) present within the proposed project site, but this species is seldomly found in urban settings. No CNDDB occurrences within 5 miles of the proposed project site (CDFW 2013).
Lasiurus xanthinus	Western yellow bat	None/ CSC	Desert and montane riparian, desert succulent scrub, desert scrub, and pinyon-juniper woodland; roosts in trees,particularly palms within urban areas; forages over water and among trees	Moderate. Suitable roosting habitat (e.g., palm trees) present within the proposed project site. Known to occur in urban areas. CNDDB occurrence approximately 3 miles northwest of the proposed project site within the vicinity of Garden Grove (CDFW 2013).
Microtus californicus stephensi	South coast marsh vole	None/ CSC	Tidal marshes in Los Angeles, Orange, and Ventura Counties.	Absent. Suitable habitat (e.g., tidal marshes) not present within the proposed project area or adjacent areas. CNDDB occurrences just within 5 miles of the proposed project site along the coast (CDFW 2013).

Scientific Name	Common Name	Status Federal/ State	Primary Habitat Associations	Potential to Occur
Myotis yumanensis	Yuma myotis	None/ SA	Closely tied to open water which is used for foraging; open forests and woodlands are optimal habitat; roosts in natural and artificial structures (caves, mines, trees, bridges, and buildings)	Low. Suitable roosting habitat (e.g., buildings and trees) and known to occur within urban areas. Open waters required for foraging not present within the proposed project site. Closest CNDDB occurrence is 25 miles northeast of the proposed project site (CDFW 2013).
Nyctinomops macrotis	Big free-tailed bat	None/ CSC	Rugged, rocky canyons; roosts in crevices of high cliffs, outcroppings, buildings, caves, and occasionally in tree cavities	Low. Suitable roosting habitat (e.g., buildings) present within proposed project site, but prefer rugged, rocky terrain not present within the project site. No CNDDB occurrences within 5 miles of the proposed project site (CDFW 2013).
Perognathus longimembris pacificus	Pacific pocket mouse	FE/ CSC	Grassland, coastal sage scrub with sandy soils; along immediate coast	Absent. Suitable habitat and soils not present withn the proposed project site. Only three known occurrences of this species. Species is common within the immediate vicinity of the Pacific Ocean, within one mile of the coast. The proposed project is approximately 4 miles north of the coast. No CNDDB occurrences within 5 miles of the proposed project site (CDFW 2013).
Sorex ornatus salicornicus	Southern California saltmarsh shrew	None/ CSC	Coastal marshes and Valley foothill and montane riparian optimal (prefers moist soil); also woodland, chaparral, grassland, and emergent wetland. Nests in wood, shrubs, and burrows.	Low. Suitable habitat (e.g., shrubs or burrows) not present within the proposed project site. Closest CNDDB occurrence is approximately 4 miles west of the proposed project site within the vicinity of Seal Beach Naval Weapons Station (CDFW 2013).
Taxidea taxus	American badger	None/ CSC	Dry, open treeless areas, grasslands, coastal sage scrub	Low. Ruderal habitat on site provides limited suitable habitat within the proposed project site. No CNDDB occurrence within 5 miles of the proposed project site (CDFW 2013).

Scientific Name	Common Name	Status Federal/ State	Primary Habitat Associations	Potential to Occur
Invertebrates				
Branchinecta sandiegonensis	San Diego fairy shrimp	FE/ None	Small, shallow vernal pools, occasionally ditches and road ruts	Low. The proposed project site is mostly developed. Soils are well drained with minimal potential for ponding or pooling water on site. No CNDDB occurrence within 5 miles of the proposed project area (CDFW 2013).
Cicindela gabbii	Gabb's tiger beetle	None/ SA	Estuaries and mudflats; generally on dark-colored mud; occasional on dry saline flats of estuaries.	Low. Suitable habitat (e.g., estuaries) not present within the proposed project area or adjacent areas. Closest CNDDB occurrence overlaps with the project area; however, the exact area of occupancy is unknown. Two other historic references approximately 3 miles south of the proposed project site along Newport Beach (CDFW 2013).
Cicindela hirticollis gravida	Sandy beach tiger beetle	None/ SA	Sandy areas adjacent to non-brackish water along California coast; found in dry sand in upper zone	Absent. Suitable habitat (e.g., non-brackish waters and sands) not present within the proposed project area or adjacent areas. No CNDDB occurrences within 5 miles of the proposed project site along (CDFW 2013).
Cicindela latesignata latesignata	Western beach tiger beetle	None/ SA	Estuary, mud shore/flats	Absent. Suitable habitat not present within the proposed project area or adjacent areas. No CNDDB occurrence within 5 miles of the proposed project site (CDFW 2013).
Cicindela senilis frosti	Tiger beetle	None/ SA	Salt marshes	Absent. Suitable habitat not present within the proposed project area or adjacent areas. No CNDDB occurrences within 5 miles of the proposed project site (CDFW 2013).
Coelus globosus	Globose dune beetle	None/ SA	Coastal dunes	Absent. Suitable habitat (e.g., coastal dunes) not present within the proposed project area or adjacent areas. No CNDDB occurrences within 5 miles of the proposed project site (CDFW 2013).

Scientific Name	Common Name	Status Federal/ State	Primary Habitat Associations	Potential to Occur
Danaus plexippus (wintering sites)	Monarch butterfly	None/ SA	Overwinters in eucalyptus groves	High. *Eucalyptus* spp. observed throughout the proposed project site could provide wintering habitat and this species was observed during the site visit. CNDDB occurrences within 2 miles of the proposed project site within Huntington Beach Central Park, Bolsa Chica Ecological Reserve, and Norma B. Gibbs Regional Park (CDFW 2013). This species is known to overwinter within a small eucalyptus grove at Goldenwest College (The Monarch Program 2013)
Panoquina errans	Wandering (= saltmarsh) skipper	None/ SA	Salt marsh from Los Angeles to Baja, Mexico	Low. Suitable salt marsh habitat not present within the proposed project site. CNDDB occurrences along the coastline approximately 4 miles south of the proposed project site, within wetland and coastal salt grass habitats at the Bolsa Chica Ecological Reserve (CDFW 2013).
Trigonoscuta dorothea dorothea	Dorothy's El Segundo Dune weevil	None/ SA	Coastal dunes	Absent. Suitable coastal dune habitat not present within the proposed project site. CNDDB occurrences within coastal dunes along the coastline approximately 4 miles south of the proposed project site (CDFW 2013).
Tryonia imitator	Mimic tryonia, California brackishwater snail	None/ SA	Coastal lagoons, estuaries and salt marshes	Absent. Suitable aquatic habitat not present within the proposed project site. Closest CNDDB occurrence approximately 2.75 miles southwest of the proposed project site within brackish coastal lagoons and estuaries at Bolsa Chica Ecological Reserve (CDFW 2013).

Scientific Name	Common Name	Status Federal/ State	Primary Habitat Associations	Potential to Occur
		Fish		
Catostomus santaanae	Santa Ana sucker	FT/ CSC	Small, shallow, cool, clear streams less than 7 meters in width and a few centimeters to more than a meter in depth; substrates are generally coarse gravel, rubble and boulder	Absent. No suitable water sources within the proposed project site.
Eucyclogobius newberryi	Tidewater goby	FE/ CSC	Low-salinity waters in coastal wetlands	Absent. No suitable water sources within the proposed project site.

Federal Designations

BCC Fish and Wildlife Service: Birds of Conservation Concern
FC Candidate for federal listing as threatened or endangered
(FD) Federally-delisted; monitored for five years
FE Federally-listed Endangered
FT Federally-listed as Threatened
MNBMC Fish and Wildlife Service Migratory Nongame Birds of Management Concern
USBC United States Bird Conservation Watch List

State Designations:

CSC California Special Concern Species
FP California Department of Fish and Game Protected and Fully Protected Species
SA Special Animal List
SE State-listed as Endangered
ST State-listed as Threatened
WL State Watch List Species

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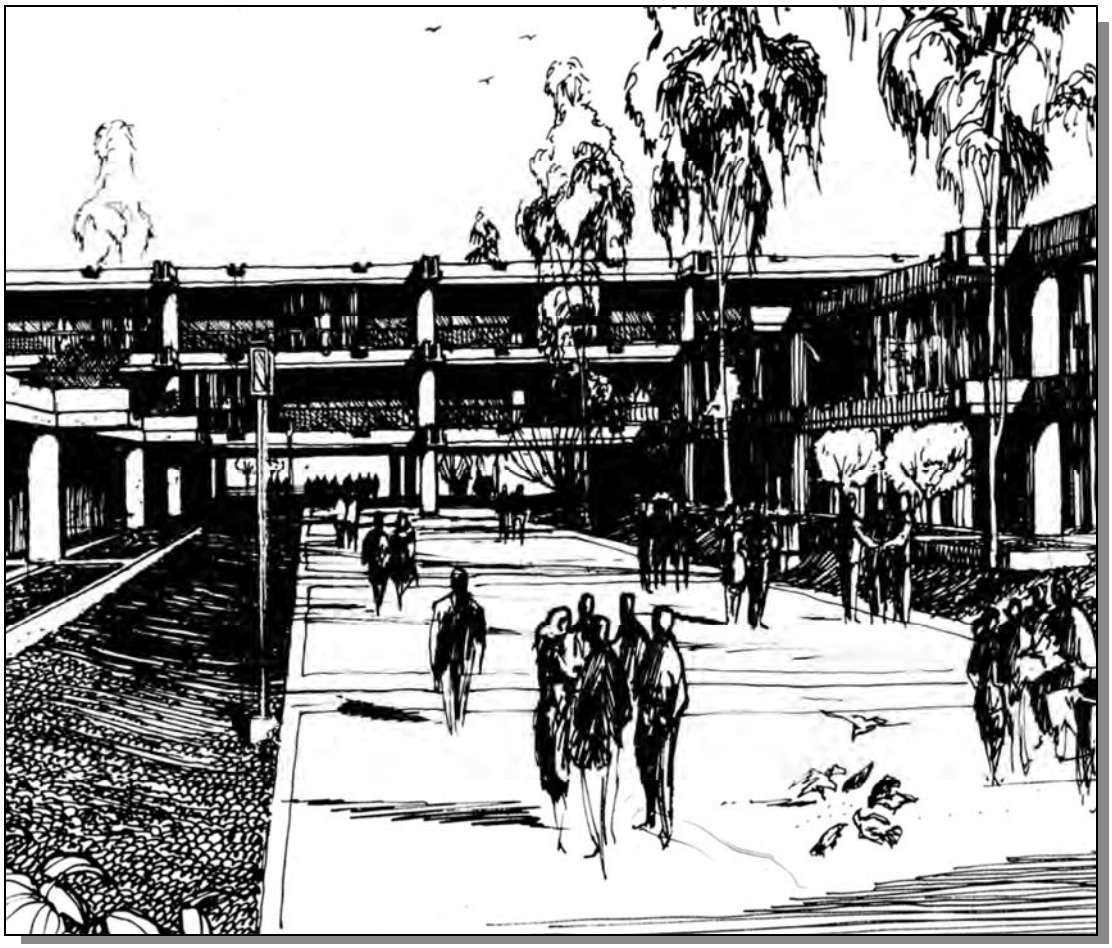
APPENDIX D

Historic Resources Technical Report

HISTORIC RESOURCES TECHNICAL REPORT

VISION 2020 FACILITIES MASTER PLAN PROGRAM EIR

Historic Resources Survey, Evaluation, and Analysis of Potential Project Impacts



JULY 2015

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CONTENTS

CONTENTS I

1. INTRODUCTION 1

A. STATEMENT OF PURPOSE 1

B. PROJECT LOCATION 1

C. PROJECT BACKGROUND AND HISTORY 1

D. HISTORIC RESOURCES ASSESSMENT METHODOLOGY 2

2. REGULATORY FRAMEWORK 7

A. FEDERAL LEVEL 7

1. National Register of Historic Places 7

B. STATE LEVEL 7

1. California Register of Historical Resources 8

2. California Environmental Quality Act 9

C. LOCAL LEVEL 10

1. City of Huntington Beach 10

3. ENVIRONMENTAL SETTING 11

A. HISTORIC CONTEXT 11

1. City of Huntington Beach 11

2. Golden West College 13

3. Architecture and the Modern Movement 13

4. William L. Pereira 15

5. Associated Architects 17

6. A. Quincy Jones - Frederick E. Emmons & Associates 18

7. Blurock Ellerbroek & Architects 18

B. EXISTING CONDITIONS 19

C. CRITERIA FOR EVALUATION OF HISTORIC RESOURCES 20

1. National Register of Historic Places Criteria 20

2. California Register of Historical Resources Criteria 24

3. California Office of Historic Preservation Survey Methodology 25

4. City of Huntington Beach 25

D. SURVEY STUDY AREA DEFINED 26

E. EVALUATION OF HISTORIC RESOURCES WITHIN STUDY AREA 26

1. Golden West College, 15744 Goldenwest Street 28

4. ANALYSIS OF PROJECT IMPACTS **43**

A. THRESHOLDS OF SIGNIFICANCE/CRITERIA FOR ADVERSE IMPACTS 43

1. CEQA Guidelines 43

2. Secretary of the Interior's Standards for Rehabilitation 44

B. PROPOSED PROJECT 46

1. Buildings and Facilities (New Construction) 47

2. Buildings and Facilities (Renovation) 48

3. Buildings and Facilities (Demolition) 48

4. Site Improvements Elements 48

C. ANALYSIS OF PROJECT IMPACTS 50

5. MITIGATION MEASURES **55**

A. CEQA MITIGATION APPROACHES 55

B. CONSIDERATION OF MITIGATION MEASURES 55

C. PROJECT MITIGATION MEASURES 56

6. LEVEL OF SIGNIFICANCE AFTER MITIGATION **59**

7. BIBLIOGRAPHY **61**

GENERAL SOURCES 61

INTERVIEWS 64

APPENDIX **65**

SUPPORTING EXHIBITS..... 65

LIST OF FIGURES

SECTION 1: INTRODUCTION

FIGURE 1- 1: Regional MAP 3

FIGURE 1- 2: Local Vicinity..... 4

SECTION 3: ENVIRONMENTAL SETTING

FIGURE 3- 1: Survey Study Area/Existing Conditions 27

FIGURE 3- 2: Potential Historic District.....41

SECTION 4: ANALYSIS OF PROJECT IMPACTS

FIGURE 4- 1: Proposed Campus Land Uses 51

FIGURE 4- 2: Proposed Vehicular Circulation Improvements 52

FIGURE 4- 3: Proposed Pedestrian Circulation Improvements 53

FIGURE 4- 4: Proposed Demolition 54

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1. INTRODUCTION

A. STATEMENT OF PURPOSE

This technical report documents and evaluates potential historic resources that may be affected by the implementation of the Golden West College Vision 2020 Facilities Master Plan (the proposed project). Golden West College (GWC) is one of three campuses operated by the Coast Community College District (District) within the county of Orange. This report is prepared to facilitate environmental compliance of the proposed project under the provisions of the California Environmental Quality Act (CEQA). The survey assessment includes a discussion of survey methods utilized, the jurisdictional framework for historical resources, a description of the subject property's environmental setting, a brief contextual history of the survey study area, an evaluation assessment of the property for historical significance, an analysis of potential project impacts on identified resources, and recommended mitigation measures for any potential adverse impacts to those resources identified as historically significant.

B. PROJECT LOCATION

The proposed project is located on the existing GWC campus in the City of Huntington Beach, California, within the northwestern portion of Orange County (Figure 1-1, Regional Map). Primary freeway access to the campus is via Interstate 405 and State Route 39 (Beach Boulevard), which are minutes from the campus. GWC is bounded by McFadden Avenue to the north, Gothard Street to the east, Edinger Avenue to the south, and Goldenwest Street to the west (Figure 1-2, Local Vicinity).

C. PROJECT BACKGROUND AND HISTORY

The District is updating its Facilities Master Plan for all three of its Orange County campuses: Orange Coast College, Golden West College, and Coastline Community College. The Vision 2020 Facilities Master Plan provides an analysis of the evolving student body and makes planning recommendations based on their educational needs. The District is undertaking a comprehensive improvement and building program to meet increasing enrollment and to make the upgrades and repairs of existing buildings as well as to construct new facilities to improve the safety and educational experience of those attending the colleges in accordance with Measure M. Measure M was passed in November 2012 and issued $698 million in bonds to fund the expansion of courses and academic buildings in engineering, math, science, and

technology, as well as to upgrade technologies, construct and repair facilities, and improve resources for active military personnel and veterans at all three District campuses.

The overall goal of the proposed project is to provide the optimal physical settings to support the District's academic mission. The Vision 2020 Facilities Master Plan proposes the development of modern teaching and learning facilities that would attract students to GWC while providing the physical resources necessary to support the educational process.

D. HISTORIC RESOURCES ASSESSMENT METHODOLOGY

In order to identify and assess historic resources, a multi-step methodology was utilized. A record search to identify previously documented historic resources was conducted. This search included a review of the National Register of Historic Places (National Register) and its annual updates, determinations of eligibility for National Register listings, and the California Historical Resources Inventory (HRI) database maintained by the State Office of Historic Preservation (OHP).

Site inspections of the project site were made to assess existing conditions, define the historic resources survey study area, document potential significant properties, and identify character-defining features of those properties evaluated as historically significant. A survey of the study area, including photography and the collection of archival background data, was then made. Additional background and site-specific research was conducted in order to evaluate potential historic resources within their proper historic context.

Criteria of the National Register of Historic Places, California Register of Historical Resources (California Register), and the City of Huntington Beach, as applicable, were employed to assess the significance of the property. In addition, the survey methodology of the OHP was utilized. More specifically, in conducting the identification and evaluation of historic resources located within the study area, the following tasks were performed:

- Searched archival records of the National Register, California Historical Resources Inventory (HRI), and the City of Huntington Beach.
- Conducted field inspections of the study area and photographed the site and its features.
- Collected and reviewed relevant historic images and archives including, but not limited to those at Golden West College, the Regional History Center at the University of Southern California, the Los Angeles Public Library, the County of Orange archives, and the University of California, Los Angeles.



SOURCE: ESRI 2013

FIGURE 1-1

Regional Map

GOLDEN WEST COLLEGE GWC HUNTINGTON BEACH, CA

7910.0001

Golden West College Vision 2020 Facilities Master Plan Historic Resources Technical Report

Path: Z:\Projects\7910011\MAPDOC\MAPS\PEIR\Project Description\GWC\Figure1_1_Regional.mxd



SOURCE: ESRI 2013, Coast Community College Vision Plan 2012, SCAG 2008

FIGURE 1-2

Local Vicinity

7910,0001

Golden West College Vision 2020 Facilities Master Plan Historic Resources Technical Report

- Conducted site-specific research on historic resources including a review of relevant architectural plans, building permits, tax assessor records, Sanborn Fire Insurance Maps, and other archival documents.
- Reviewed and analyzed previous documentation, ordinances, statutes, regulations, bulletins, and technical materials relating to federal, state, and local historic preservation, designation assessment processes, and related programs.

This historic resources survey assessment was conducted and prepared by Jan Ostashay, Principal, Ostashay & Associates Consulting, and Peter Moruzzi, Consulting Associate, who both satisfy the U.S. Secretary of the Interior's Professional Qualification Standards in history and architectural history.

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2. REGULATORY FRAMEWORK

Historic resources fall within the jurisdiction of several levels of government. Federal laws provide the framework for the identification, and in certain instances, protection of historic resources. Additionally, states and local jurisdictions play active roles in the identification, documentation, and protection of such resources within their communities.

Numerous laws and regulations require federal, state, and local agencies to consider the effects of a proposed project on historic resources. These laws and regulations stipulate a process for compliance, define the responsibilities of the various agencies proposing or overseeing the action, and prescribe the relationship among other involved agencies (e.g., State Historic Preservation Office and the Advisory Council on Historic Preservation). The National Historic Preservation Act (NHPA) of 1966, as amended; the California Environmental Quality Act (CEQA); and the California Register of Historical Resources; Public Resources Code (PRC) 5024 are the primary laws, policies, and programs governing and affecting preservation of historic resources of national, state, and local significance. A description of these laws and regulations is provided in the following paragraphs.

A. FEDERAL LEVEL

1. NATIONAL REGISTER OF HISTORIC PLACES

First authorized by the Historic Sites Act of 1935, the National Register of Historic Places (National Register) was established by the NHPA, as "an authoritative guide to be used by Federal, State, and local governments, private groups and citizens to identify the Nation's cultural resources and to indicate what properties should be considered for protection from destruction or impairment."[1] The National Register recognizes properties that are significant at the national, state and local levels. Further discussion of National Register criteria and guidelines is provided in Section 3, Environmental Setting, of this document.

B. STATE LEVEL

The California Office of Historic Preservation, as an office of the California Department of Parks and Recreation, implements the policies of the NHPA on a state-wide level. The OHP also carries out the duties as set forth in the Public Resources Code (PRC) and maintains the California Historic Resources Inventory. The State Historic Preservation Officer (SHPO) is an appointed

[1] *Code of Federal Regulations (CFR), 36 Section 60.2.*

official who implements historic preservation programs within the state's jurisdictions. Also implemented at the state level, CEQA requires projects to identify any substantial adverse impacts which may affect the significance of identified historical resources. Further discussion of OHP survey methodology and specific criteria to determine the significance of a resource are also provided in Section 3, Environmental Setting, of this document.

1. California Register of Historical Resources

Created by Assembly Bill 2881, which was signed into law on September 27, 1992, the California Register is "an authoritative listing and guide to be used by state and local agencies, private groups, and citizens in identifying the existing historical resources of the state and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change."[2] The criteria for eligibility for the California Register are based upon National Register criteria.[3] Certain resources are determined by the statute to be automatically included in the California Register, including California properties formally determined eligible for, or listed in, the National Register of Historic Places.[4]

The California Register consists of resources that are listed automatically and those that must be nominated through an application and public hearing process. The California Register automatically includes the following:

- California properties listed on the National Register of Historic Places and those formally Determined Eligible for the National Register of Historic Places;
- California Registered Historical Landmarks from No. 770 onward;
- Those California Points of Historical Interest that have been evaluated by the OHP and have been recommended to the State Historical Commission for inclusion on the California Register.[5]

Other resources which may be nominated to the California Register include:

- Individual historical resources;
- Historical resources contributing to historic districts;

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2 *California Public Resources Code Section 5024.1(a).*

3 *California Public Resources Code Section 5024.1(b).*

4 *California Public Resources Code Section 5024.1(d).*

5 *California Public Resources Code Section 5024.1(d).*

- Historical resources identified as significant in historical resources surveys with significance ratings of Category 1 through 5;
- Historical resources designated or listed as local landmarks, or designated under any local ordinance, such as a historic preservation overlay zone.[6]

2. California Environmental Quality Act

Under CEQA, a "project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment."[7] This statutory standard involves a two-part inquiry. The first involves a determination of whether the project involves a historical resource. If so, then the second part involves determining whether the project may involve a "substantial adverse change in the significance" of the historical resource. To address these issues, guidelines that implement the 1992 statutory amendments relating to historical resources were adopted in final form on October 26, 1998 with the addition of State CEQA Guideline Section 15064.5. The State CEQA Guidelines provide that for the purposes of CEQA compliance, the term "historical resources" shall include the following:[8]

- "A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources.
- A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in a historical resource survey meeting the requirements in section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources, including the following:

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6 *California Public Resources Code Section 5024.1(e).*

7 *California Public Resources Code Section 21084.1 – Added in 1992 by AB 2881.*

8 *State CEQA Guidelines, 14 CCR Section 15064.5(a).*

a. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

b. Is associated with the lives of persons important in our past;

c. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

d. Has yielded, or may be likely to yield, information important in prehistory or history.

- The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to section 5020.1(k) of the Public Resources Code), or identified in a historical resources survey (meeting the criteria in section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be a historical resource as defined in Public Resources Code sections 5020.1(j) or 5024.1."

C. LOCAL LEVEL

1. CITY OF HUNTINGTON BEACH

The General Plan of the City of Huntington Beach includes a Historic and Cultural Resources Element that identifies a number of properties as local landmarks within the community. The list of local landmarks was compiled in 1991 and was adopted into the General Plan in 1996. Though the City does not currently have a historic preservation ordinance or formal eligibility criteria or designation procedures for properties to be added to the landmarks list, it does have the Historic Resources Board, which is an advisory board to the City Council.

The Board's purpose is to encourage and promote programs and activities that enhance public awareness of historic resources. The Historic Resources Board also serves as a liaison to Council for local, state, and federal groups and agencies whose interest involves historic issues. It also advises on issues of historic preservation to the Planning Commission and the Community Services Commission to insure that historic preservation matters are considered in the planning for future development of the community. The Historic Resources Board was established in 1987 as an eleven member advisory board.

Because of its status as a California public community college, GWC is exempt from local City of Huntington Beach regulatory oversight.

3. ENVIRONMENTAL SETTING

A. HISTORIC CONTEXT

1. CITY OF HUNTINGTON BEACH[9]

The area that is now Huntington Beach came under European control as a portion of a large land grant from the Spanish Governor of California, Pedro Fages, to one of his soldiers, Jose Manuel Nieto, in approximately 1784. In 1834, following Mexico's independence from Spain, the original land grant, stretching from the ocean by Newport Beach, north into the La Habra Heights area and east into San Bernardino County, was split at the request of the Nieto heirs. Mexican Governor Jose Figueroa deeded a section called Rancho Las Bolsas, consisting of 21 square miles, to Catarina Ruiz, a widow of one of the Nietos. This area later became the cities of Huntington Beach, Garden Grove, Westminster, and Fountain Valley.

Seven years later, a 6-square-mile rancho to the northwest, Bolsa Chica, was split off and granted to Joaquin Ruiz. In 1850, Abel Stearns acquired both Las Bolsas and Bolsa Chica Ranchos, making him the largest land and cattle owner in the state. As a result of a severe drought in 1867, Mr. Stearns sought financial assistance, thereby formulating the Stearns Rancho Company. Under the Stearns Rancho Company, the Huntington Beach area was considered valueless and sold for $5 to $10 an acre because of the swampy thick vegetative areas and saltwater marshes. These swampy willow thickets became a haven for fugitives and religious groups and the area was soon known as "Gospel Swamp" because it was used by early minister-settlers to preach.

Colonel Robert Northam purchased the mesa from the Stearns Rancho Company. It was soon known as Shell Beach. Since the swamp surrounded the mesa most of the year, no railroads, bridges, or roads linked the mesa to any existing community. William Newland, who developed farmland in the area, settled atop the mesa in 1897. His family's original home, erected the following year, is the oldest remaining in the City and is listed in the National Register of Historic Places.

Investor Philip Stanton formed a local syndicate in 1901 and purchased 1,500 acres of Rancho Las Bolsas from Robert Northam for $100,000. The group, organized as the West Coast Land Company, subdivided 40 acres along both sides of what is now known as Main Street, and

[9] *Adapted from "A Hundred Years of Yesterdays: A Centennial History of the People of Orange County and their Communities" by Karen Turnbull, 1988.*

called it Pacific City. Water wells were drilled and streets were paved. Only 18 months after establishing Pacific City, Stanton's syndicate sold its assets to another group led by Henry Huntington. Two years later, in 1904, Huntington's interurban railway, the "red cars," was extended from Long Beach to the recently renamed Huntington Beach.

The community incorporated in 1909 as a townsite with 3.57 square miles and a population of 1915. Early Huntington Beach settlers discovered natural gas while drilling for water. In 1919, geologists influenced by the natural gas discoveries started exploratory oil drilling. Practically overnight, the small town exploded with oil fever. The town suddenly grew from 1,500 to 5,000 people.

Although oil was the primary factor in Huntington Beach's economy, the City did not ignore the community's need for recreational and cultural opportunities. In 1921, the City purchased, from the Huntington Beach Company, a beach area from the pier to 9th Street for $75,000.

Although most of Southern California experienced a housing boom after World War II, the rapid expansion had comparatively little effect on Huntington Beach since so much of the surrounding land was in active oil production or agricultural use. The original 1909 townsite of 3.57 square miles remained much the same until various annexations in the late 1950s. From 1957 through 1960, Huntington Beach experienced its most rapid growth, increasing in size to 25 square miles as a result of 11 farmland annexations. Land values increased dramatically as a result of growing population pressures in Orange County. Outlying farms were sold and suburban residential uses developed. A major employer in the City is Boeing Aircraft Company that bought aerospace manufacturer McDonnell Douglas in the 1990's. In recent years, many of the original oil fields have been cleared for development. However, the oil industry remains a part of Huntington Beach's character and image.

In 1925, Hawaiian Olympian Duke Kahanamoku brought the sport of surfing to Huntington Beach. The city's first surf shop, Gordie's Surf Boards, opened in 1953. Six years later, the first U.S. Surfing Championships were held in Huntington Beach. The following year, the Surfing Championships were covered on television, which greatly increased the City's renown. Today, Huntington Beach is internationally known as "Surf City."

Over the past forty years new construction and redevelopment of many areas within the city have occurred and continues to date. The community's history is evident in its built environment and architecture.

2. Golden West College

Golden West College (GWC) is a community college providing two-year associate of arts degrees, and lower-division classes transferable to other colleges and universities. GWC was conceived in 1961, as the second campus within the Orange Coast Junior College District (now Coast Community College District). Its purpose was to address the anticipated "education explosion" that was predicted at this time to require double the nation's existing facilities for higher education at that time.[10]

Orange Coast College (OCC) in Costa Mesa was the first campus created by the District and opened in 1948. GWC would be built in Huntington Beach upon a 109-acre portion of the original 600-acre Golden West Farms. The new junior college would be named after the farm with the Old West-themed "Rustler" becoming the school's mascot. In 1963, the architectural firm of William L. Pereira & Associates (WLPA) was chosen to plan and design the campus and all of its buildings. Pereira envisioned a design for the campus that would be unique and interesting, and more like a garden-like pavilion with distinct yet expandable buildings set among its landscape.[11]

District trustees approved the GWC master plan in early 1964, with an expected initial student population of 1,500 when officially opened in September 1966. Plans called for future expansion to accommodate 5,000 students with the potential to grow to a maximum of 10,000 students. Dr. R. Dudley Boyce, a Stanford University administrator and former OCC instructor-counselor, was named the first GWC president. Groundbreaking and campus construction began in 1965; doors opened to 1,600 day students and 3,000 night students on September 12, 1966, despite the fact that several buildings would not be completed for another 30 days.

Over the decades the student population has ebbed and flowed with a high of 23,112 students in 1981 and 17,156 in 2013-2014. Today, Golden West College is especially known for curriculums in Nursing, Police Science, and Cosmetology.

3. Architecture and the Modern Movement

In the 20th century, Modernism in the realm of architecture was one aspect of the Modern Movement that began in Europe after World War I. Modern architecture as practiced in the 1920s by disciples of the German Bauhaus School stressed a universality of design freed from historical references. Under this philosophy, a building designed according to Modernist

[10] *Los Angeles Times, "College Designed to Grow with Population," February 23, 964, p. L13.*

[11] *Kirkpatrick, Gerie. "History of Golden West College," self-published.*

principles, whether residential, commercial, institutional, or any other building type, would succeed wherever it was placed. The pre-World War II designs of European architects Le Corbusier, Walter Gropius, and Ludwig Mies van der Rohe illustrated this philosophy, which was dubbed the "International Style," because the buildings would be suitable anywhere in the world.[12]

International Style buildings express the tenets of form following function and a rejection of applied ornamentation. Compositionally, a balance of unlike parts is often substituted for symmetry. Character-defining features include flat roofs, smooth and uniform exterior surfaces, large expanses of glass, minimal overhangs, and cantilevered elements. Skeleton construction of steel or reinforced concrete is typical, especially for larger buildings. Rectilinearity predominates. In the United States, the first International Style buildings were the Lovell Health House of 1928 in Los Angeles and the Aluminaire House of 1931 in New York. The first International Style high-rise commercial building in America was the Philadelphia Saving Fund Society building by George Howe and William Lescaze erected in that city in 1932.

By the late 1930s, the mostly German masters of the Modern Movement – Gropius, Mies van der Rohe, and Marcel Breuer – had relocated to the United States. Mies and Gropius both attained prestigious academic positions upon their arrival, Mies at the Illinois Institute of Technology in Chicago and Gropius at Harvard University in Cambridge.

After World War II, "Modernism" became the principal architectural style applied to buildings of every type throughout the United States, although less so for single-family dwellings where traditional styles continued to predominate. From 1945 through 1970, various architects interpreted Modernism in a wide variety of ways. In Brazil, an organic modernism of curves and biomorphic shapes appeared. Out of Chicago, a variant known as the Miesian style emerged that was based upon the architectural philosophy of Mies van der Rohe. The Miesian style was predicated upon rectangular forms of the utmost regularity and precision, a modular pattern established by the structural frame typically of steel, with glass curtain walls and overall symmetry. By the mid-1960s, the Miesian style was the style of choice for corporate high rises in most American cities.

In the late 1950s, a reaction against the restraints of the International Style and Miesian designs resulted in a New Formalism applied primarily to prominent institutional buildings such as museums, embassies, and philharmonic theaters. New Formalism sought to reintroduce

[12] *Curators Henry-Russell Hitchcock and Philip Johnson coined the term "International Style" in literature when describing the progressive architecture of the modern movement that they featured at the Museum of Modern Art's seminal International Exhibition of Modern Architecture held in 1932.*

classical forms such as the arch, columns, and temple-like monumentality updated and refined using modern methods and expensive surface materials.

In direct contrast to the New Formalist approach, a Brutalist architectural style appeared in the 1960s. It is the style closest to what Pereira chose for the buildings of Golden West College. Brutalism is an architecture of mass, weight, roughness, and solidity. Its form is derived from exposed concrete that is often given a rough surface or shows the marks of the wooden formwork. Windows are treated as holes or as voids in the solids of exterior elevations and not, as in the International Style, as continuations of the "skin" of the building. The exposed, unadorned but generally smooth concrete of the original Golden West College buildings is Brutalist in inspiration. However, it differs in that the utilitarian post and lintel modular design is visually lighter in mass and weight than typical Brutalist buildings.

4. WILLIAM L. PEREIRA[13]

William Pereira (1909-1985) was born in Chicago, majoring in architecture at the University of Illinois. He relocated to Los Angeles in 1938, where, over the next decade he worked for Paramount Studios as architect, photographer, art director, and producer. After World War II through the 1970s, in addition to his career as an active architect, Pereira taught at the School of Architecture at the University of Southern California. From 1945-1950, Pereira's architectural practice was small with relatively few commissions of note. Then, in 1950, Pereira formed a partnership with his old University of Illinois classmate, the architect-turned-businessman: Charles Luckman.[14] In their eight years together, Pereira and Luckman received increasingly larger commissions for buildings and planning projects. Celebrated projects by the architectural team in southern California included Marineland of the Pacific (Palos Verdes), CBS Television City (Los Angeles), the Disneyland Hotel (Anaheim), Union Oil Company (UNOCAL) headquarters, the Los Angeles headquarters of Firestone Tire and Rubber Company, the new campus of the University of California at Santa Barbara, several Robinson's Department Stores, and the master plan for the enlargement and updating of the Los Angeles International Airport. The partner's split in 1958 and each formed their own practice: "William L. Pereira & Associates" and "The Luckman Partnership." Each architect would go on to be involved with significant projects locally and worldwide.

[13] *Adapted from "Pereira and Luckman, the Ambivalent Partnership (1950-1958)" by Thomas S. Hines, pp. 28-35. Published in the exhibition catalog for "Modernist Maverick: The Architecture of William L. Pereira, July 27-October 13, 2013," organized by the Nevada Museum of Art.*

[14] *Ibid, p. 29.*

William L. Pereira & Associates (WLPA) began with a small group of architects, but quickly grew into a large office rivaling that of the former Pereira and Luckman firm at their peak. It was during the early and mid-1960s that Pereira refined his practice and, ultimately, the work for which he is largely remembered.[15] Pereira was an early adopter of new construction technologies in which he integrated into many of his designs. His enthusiasm for precast concrete panels, for instance, was more than mere techno-fetishization, but rather a sustained engagement with what could otherwise be an inappropriately industrial material.[16]

Within the Orange County area, two of Pereira's most ambitious projects were his planning and design of the University of California, Irvine (UC Irvine) campus and the master planning for what would become the community of Irvine (incorporated 1971). One thousand acres of ranch land was donated by the Irvine Company for the University of California at Irvine (UC Irvine) campus, which Pereira began master planning in 1959 at the same time as he was planning the portion of the 93,000-acre ranch that became the City of Irvine.

Pereira searched for grand gestures to unify complex master plans. This is exemplified by his master plan for UC Irvine. Modern, idealistic in his pursuit, and always envisioning an optimistic and harmonious future, he felt that strong formal moves had the power to create consensus and organize the collateral events of community life around civility and ceremony.[17]

The plan for the new UC Irvine campus was a broad circle with radiating spokes representing academic and administrative districts plus outlying support neighborhoods connected to the city's main street by a pedestrian bridge. In the center of the ring at UC Irvine lay Aldrich Park, a naturalistic garden space named for the founding chancellor, Daniel Aldrich. Construction of the UC Irvine campus began in 1965, the same year that Golden West College's initial buildings were also being built. Eight major buildings were sited around its perimeter of which William L. Pereira designed six.

In 1965, WLPA designed Golden West College utilizing an innovative modular approach for the campus buildings. In comparing the two campuses there are substantial differences in planning and architectural design. Although both were constructed on previously unimproved land, UC Irvine's plan was based on a circle with radiating spokes. GWC's plan was purely rectilinear, based on a 40-foot by 40-foot grid.

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[15] *Johnson, Scott. "Modernist Maverick: The Architecture of William L. Pereira, July 27-October 13, 2013," Reno, NV: Nevada Museum of Art, 2013, p. 15.*

[16] *Manaugh, Geoff. "Modernist Maverick: The Architecture of William L. Pereira, July 27-October 3, 2013," Reno, NV: Nevada Museum of Art, 2013, p.53.*

[17] *Johnson, p.19.*

Architecturally, the modular buildings at GWC were, by their very nature, practically identical in their construction and appearance, varying primarily in height and footprint. In contrast, there was substantially more variety in the design and appearance of the buildings Pereira designed for UC Irvine. Historic photographs reveal that the UC Irvine buildings, markedly larger in size that those at GWC, featured façades that generally differed from building to building and also by elevation. Each was raised above the ground for a floating effect with a first floor balcony encircling the edifice. In addition, red tile-covered hipped roofs capped the UC Irvine buildings versus the flat roofs at GWC. However, the two campuses shared Pereira's fondness for exposed, repetitive, precast concrete. At GWC, this was expressed as a 40-foot-square modular exterior skeletal frame of posts and lintels. At UC Irvine, it appeared as bands of window panels shaded by projecting hoods.

UC Irvine was to be the central, unifying component of an entirely new city master planned by William L. Pereira. For Golden West College, WLPA had more modest goals – to design a campus of modular buildings that could accommodate a growing student population in the City of Huntington Beach. Pereira succeeded in accomplishing both.

In reviewing WLPA's output, it can be concluded that Pereira's lengthy career resulted in the completion of an extraordinary number of buildings and urbanistic statements, ranging from the residential scale of his own home to the planning of the vast Irvine Ranch complex that became the community of Irvine and site of the UC Irvine campus. As typical with mid-century modern architecture, Pereira's work has not been well-studied or analyzed until recently. In reviewing his portfolio of work, the scale of some of his more significant projects, and the noted recognition he has received in the past, it is evident that his professional work both visually and physically have played an important and indelible role in the development pattern of southern California.[18]

5. Associated Architects

References in newspaper articles and elsewhere, as well as on the actual title block of the original construction plans for Golden West College, dated June 15, 1965, list William L. Pereira & Associates, in addition to associated architects A. Qunicy Jones, Frederick E. Emmons & Associates and Blurock Ellerbroek & Associates. The address noted on the project plans is listed as Urbanus Square, MacArthur Boulevard at Ford Road, Corona del Mar, California.

Urbanus Square, with a formal address 2418 MacArthur Boulevard in Irvine (initially part of Corona del Mar and originally called Buffalo Ranch), was the locale of Pereira's Orange County

[18] *Smith, p. 27.*

office (now demolished). From 1962 to 1975 Pereira maintained an office with support staff here while he worked on several of his key Orange County projects, including the planning and design of the UC Irvine campus, the master plan for the city of Irvine, the master planning of the Irvine Ranch (Newport Center and Fashion Island among other areas), the design of the Laguna Theater, the initial planning and design of the Golden West College site and its associated buildings, and the ziggurat Chet Hoifield Building for North American Rockwell in Laguna Niguel. He also worked from this office as he developed the site selection and planning of the University of San Diego and the design of its spheroidal library.

Pereira spearheaded a collaborative team of noted architects and planners in the planning and design of not only the UC Irvine campus but also the Golden West College campus among other programs. As typically done for such large-scale projects, Pereira worked with professionals of similar mindset and design theory, including modernists A. Quincy Jones and Frederick E. Emmons who assisted Pereira with planning and design and the Orange County based architectural firm of Blurock Ellerbroek & Architects who served as the local associate architect. This extended team played a vital role in implementing Pereira's visionary master plans and design programs.

6. A. Quincy Jones - Frederick E. Emmons & Associates

The partnership of noted architects A. Quincy Jones and Frederick E. Emmons spans roughly 18 years, from 1945 to 1969 when Emmons retired. During this span, they produced a wide variety of work throughout much of southern California that ranged from small residential projects to university master plans. While most of their work was concentrated in southern California, they also had projects (primarily residential) in northern California from Palo Alto to Sacramento. Their practice was consistent in their implementation of rationalized building systems, sensitive site design, consideration of the user, and experimentation with both design and materials. The partnership grew to include commissions for churches, manufacturing plants, university and college structures, libraries, and commercial buildings of varying size. Their work also included a long-term partnership with developer Joseph Eichler, who commissioned the team to design and plan dynamic, livable neighborhood communities with housing for the post-World War II era moderate-income family. Jones and Emmons worked in partnership with Pereira in his master planning and design of the city of Irvine, portions of the UC Irvine campus, and sections of the GWC campus.

7. Blurock Ellerbroek & Architects

William H. Blurock, FAIA (1922-2012) was a Newport Beach architect whose work from the 1950s through the 1970s was considered visionary in the burgeoning field of modern

educational design. Over his long career, Blurock guided the planning and design of buildings on 32 California college campuses, and scores of other educational facilities throughout the state, including Orange Coast College and the University of California, Irvine. A Los Angeles native, Blurock was a 1947 graduate of the University of Southern California, School of Architecture. In 1993, he was honored as the Distinguished Alumnus of the architecture school and was elected an AIA Fellow in 1968 for outstanding contributions to the design and science of construction. By 1970, Blurock's architectural practice was listed as William Blurock & Partners, a successor to William H. Blurock & Associates. He served on the local AIA Orange County chapter as president and as an AIA national director in the late 1970s. He was appointed by Governor Ronald Reagan to the California State Board of Architectural Examiners for which he served 13 years.

Philmer J. Ellerbroek (1905-1969), the partner of Blurock Ellerbroek & Architects, was from Sioux City, Iowa and also studied at the University of Southern California graduating in 1928. He was a member of the AIA Orange County chapter having served as president in 1954 and was later elected as an AIA Fellow in 1967. He established his own practice in 1946 and later became a partner in Pleger, Blurock, Hougan and Ellerbroek in the late 1950s. He served on the Newport Beach Planning Commission from 1940 to 1950. In reviewing the *American Architects Directory* (1956, 1962) besides his work with the firm herein at the GWC campus, other representative examples of his work include the design of a department store in Corona (1952), a number of elementary schools in Newport Beach (1955), and an office building in Newport Beach (1955), and modernist style residential properties in and around Newport Beach. He went on to join William H. Blurock in the 1960s to establish Blurock Ellerbroek & Associates and later established his own private practice.

B. EXISTING CONDITIONS

The campus occupies an approximately 109-acre site in the City of Huntington Beach in northwestern Orange County. GWC, like most of Huntington Beach, is located on flat terrain. The City of Huntington Beach is surrounded by the cities of Seal Beach to the northwest, Westminster to the north, Fountain Valley and Costa Mesa to the east, Newport Beach to the southeast, and the Pacific Ocean to the west and south.

The campus is located in an urbanized setting. North and west of the campus, across West McFadden Avenue and Goldenwest Street, respectively, are low-density residential developments (single-family dwellings). East of the campus across Gothard Street is a mix of unimproved land and high-density residential development (multi-family dwellings). Commercial development is located south of the campus across Edinger Avenue and adjacent to the campus on the southeast corner of Edinger Avenue and Gothard Street. GWC is

accessible from the surrounding areas by three primary access points: Center Avenue, Edinger Avenue, and Goldenwest Street.

GWC is part of the Coast Community College District, a multi-college district that includes Orange Coast College and Coastline Community College, a regional organization providing administrative services and funding for post-secondary education. The district is chartered by the state of California to provide community college services. The mission of GWC is to provide inexpensive education in the trades, licensed trades and skilled professions, as well as remedial and transferable lower-division courses for students who plan to transfer to either a California State University, a campus of the University of California, or another university.

Currently, the GWC campus contains more than 38 buildings and multiple recreational fields. Large surface parking lots are on west and south sides of the property with a smaller parking area on the campus' east side. Separating the parking areas from the central campus are thickly landscaped berms that effectively shield much of the campus from view. Classrooms and academic buildings are predominately in the center of the campus. Athletic buildings and fields make up the majority of the northern portion of the campus grounds. An outdoor amphitheater is situated at the east side of the campus just north of the theater building. A contemporary style structure housing a "CVS Pharmacy" is located within the northwest corner of the campus grounds, on land owned by the Coast Community College District. A retail center, not owned by the District, is next to the southeast edge of the campus next to the intersection of Gothard Street and Edinger Avenue.

C. CRITERIA FOR EVALUATION OF HISTORIC RESOURCES

In assessing the historic significance of properties located within the study area, various criteria for designation under federal, state, and local landmark programs were considered and applied. The California Office of Historic Preservation survey methodology and instructions were used to evaluate the relative significance of properties.

1. NATIONAL REGISTER OF HISTORIC PLACES CRITERIA

To be eligible for listing in the National Register, a resource must be significant in American history, architecture, archaeology, engineering, or culture. Districts, sites, buildings, structures, and objects of potential significance must also possess integrity of location, design,

setting, materials, workmanship, feeling, and association. For National Register consideration four criteria have been established to determine the historical significance of a resource:[19]

CRITERIA

A property of potential significance must meet one or more of the following four established criteria:

A. It is associated with events that have made a significant contribution to the broad patterns of our history;

B. It is associated with the lives of persons significant in our past;

C. It embodies the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction;

D. It yields, or may be likely to yield, information important in prehistory or history.

A property eligible for the National Register must meet one or more of the above criteria. In addition, unless the property possesses exceptional significance, it must be at least fifty years old to be eligible for National Register listing.

EXCEPTIONAL SIGNIFICANCE

A property is usually considered for its historic significance after it reaches the age of fifty (50) years. This threshold is not concrete, but was chosen as a reasonable span of time to develop historical perspective and evaluate significance adequately. The California Register is similar to the National Register when assessing properties less than fifty years old for historical significance and also utilizes the fifty-year threshold.

The National Register guidelines indicate that any building less than fifty years of age must be considered under Criteria Consideration G, which states that "a property achieving significance within the last fifty years is eligible if it is of exceptional importance.[20] Properties

[19] *Guidelines for Completing National Register Forms, National Register Bulletin 16, U.S. Department of Interior, National Park Service, September 30, 1986 ("National Register Bulletin 16"). This bulletin contains technical information on comprehensive planning, survey of cultural resources and registration in the National Register of Historic Places.*

[20] *How to Apply the National Register Criteria for Evaluation, National Register Bulletin, p.41.*

that are less than fifty years old must meet Criteria Consideration G, as must "a property that continues to achieve significance into a period less than fifty years before the nomination."[21]

INTEGRITY

In addition to meeting the criteria of significance, a property must have integrity. "Integrity is the ability of a property to convey its significance."[22] According to *National Register Bulletin 15*, the National Register recognizes seven aspects or qualities that, in various combinations, define integrity. To retain historic integrity a property will always possess several, and usually most, of these seven aspects. Thus, the retention of the specific aspects of integrity is paramount for a property to convey its significance.[23] The seven factors that define integrity are location, design, setting, materials, workmanship, feeling and association. The following is excerpted from *National Register Bulletin 15,* which provides guidance on the interpretation and application of these factors:

- Location is the place where the historic property was constructed or the place where the historic event occurred.[24]
- Design is the combination of elements that create the form, plan, space, structure, and style of a property.[25]
- Setting is the physical environment of a historic property.[26]
- Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.[27]

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[21] *Ibid.*

[22] *National Register Bulletin 15, p. 44.*

[23] *Ibid.*

[24] *"The relationship between the property and its location is often important to understanding why the property was created or why something happened. The actual location of a historic property, complemented by its setting is particularly important in recapturing the sense of historic events and persons. Except in rare cases, the relationship between a property and its historic associations is destroyed if the property is moved." Ibid.*

[25] *"A property's design reflects historic functions and technologies as well as aesthetics. It includes such considerations as the structural system; massing; arrangement of spaces; pattern of fenestration; textures and colors of surface materials; type, amount, and style of ornamental detailing; and arrangement and type of plantings in a designed landscape." Ibid.*

[26] *Ibid, p.45.*

[27] *"The choice and combination of materials reveals the preferences of those who created the property and indicated the availability of particular types of materials and technologies. Indigenous materials are often the focus of regional building traditions and thereby help define an area's sense of time and place." Ibid.*

- Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory.[28]
- Feeling is a property's expression of the aesthetic or historic sense of a particular period of time.[29]
- Association is the direct link between an important historic event or person and a historic property.[30]

In assessing a property's integrity, the National Register criteria recognize that properties change over time, therefore, it is not necessary for a property to retain all its historic physical features or characteristics. The property must retain, however, the essential physical features that enable it to convey its historic identity.[31]

For properties which are considered significant under National Register Criteria A and B, *National Register Bulletin 15* states that a property that is significant for its historic association is eligible if it retains the essential physical features that made up its character or appearance during the period of its association with the important event, historical pattern, or person(s).[32]

In assessing the integrity of properties which are considered significant under National Register Criterion C, *National Register Bulletin 15* provides that a property important for illustrating a particular architectural style or construction technique must retain most of the physical features that constitute that style or technique.[33]

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[28] *"Workmanship can apply to the property as a whole or to its individual components. It can be expressed in vernacular methods of construction and plain finishes or in highly sophisticated configurations and ornamental detailing. It can be based on common traditions or innovative period techniques." Ibid.*

[29] *"It results from the presence of physical features that, taken together, convey the property's historic character." Ibid.*

[30] *"A property retains association if it is the place where the event or activity occurred and is sufficiently intact to convey that relationship to an observer. Like feeling, association requires the presence of physical features that convey a property's historic character. . . Because feeling and association depend on individual perceptions, their retention alone is never sufficient to support eligibility of a property for the National Register." Ibid.*

[31] *Ibid, 15, p. 46.*

[32] *Ibid.*

[33] *"A property that has lost some historic materials or details can be eligible if it retains the majority of the features that illustrate its style in terms of the massing, spatial relationships, proportion, pattern of windows and doors, texture of materials, and ornamentation. The property is not eligible, however, if it retains some basic features conveying massing but has lost the majority of the features that once characterized its style." Ibid.*

CONTEXT

To be eligible for listing in the National Register, a property must also be significant within a historic context. *National Register Bulletin 15* states that the significance of a historic property can be judged only when it is evaluated within its historic context.[34] Historic contexts are "those patterns, themes, or trends in history by which a specific…property or site is understood and its meaning…is made clear." A property must represent an important aspect of the area's history or prehistory and possess the requisite integrity for the National Register.

2. CALIFORNIA REGISTER OF HISTORICAL RESOURCES CRITERIA

To be eligible for the California Register, a historic resource must be significant at the local, state, or national level under one or more of the following four criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; and/or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

Additionally, a historic resource eligible for listing in the California Register must meet one or more of the criteria of significance described above and retain enough of its historic character or appearance (integrity) to be recognizable as a historic resource and to convey the reasons for its significance. Historical resources that have been rehabilitated or restored may be considered and evaluated for California Register listing.[35]

Integrity, as considered for the California Register, is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association. The resource must also be judged with reference to the particular criteria under which it is proposed for eligibility. It is possible that a historic resource may not retain sufficient integrity

[34] *Ibid. p.7.*

[35] *California Code of Regulations, California Register of Historical Resources (Title 14, Chapter 11.5), Section 4852(c).*

to meet the criteria for listing in the National Register, but it may still be eligible for listing in the California Register.[36]

3. California Office of Historic Preservation Survey Methodology

The evaluation instructions and classification system prescribed by the OHP in its *Instructions for Recording Historical Resources* provide a three digit evaluation code for use in classifying potential historic resources. The first digit indicates one of the following general evaluation categories.

1. Listed in the National Register or the California Register;
2. Determined eligible for listing in the National Register or the California Register;
3. Appears eligible for the National Register or the California Register through survey evaluation;
4. Appears eligible for the National Register or the California Register through other evaluation;
5. Recognized as Historically Significant by Local Government;
6. Not eligible for any Listing or Designation; and
7. Not evaluated for the National Register or California Register or needs re-evaluation.

The second digit is a letter code to indicate whether the resource is separately eligible (S), eligible as part of a district (D), or both (B). The third digit is a number, which is used to further specify significance and refine the relationship of the property to the National Register and California Register. Under this system categories 1 through 4 pertain to various levels of National Register or California Register eligibility. Category 5 pertains to properties that are ineligible for National Register or California Register listing, but are recognized as historically significant by local government. In addition, properties not eligible for listing or designation in the National Register, California Register, or at the local level, but perhaps are of local interest in the planning process are given an evaluation status code of 6.

4. City of Huntington Beach

As previously discussed, the City of Huntington Beach does not currently have a historic preservation ordinance, formal eligibility criteria, or designation procedures for properties to be

[36] *Ibid.*

recognized as local landmarks. However, according to the Historic and Cultural Resources Element of the City's General Plan, a property can be identified as significant in one of following four ways:

- Recommendation by the Historic Resources Board;
- Being listed on the National Register of Historic Places;
- Being located within a potential historic district as identified in the 1986 downtown survey; or
- Designation as a local landmark by the Huntington Beach City Council.

D. SURVEY STUDY AREA DEFINED

The study area was identified based on the anticipated direct and indirect effects of the proposed project on potential historic resources. The study area was defined as the project site itself, which is the GWC campus (15744 Goldenwest Street). A map of the survey study area and existing conditions of the campus is illustrated in Figure 3-1, Survey Study Area/Existing Conditions.

E. EVALUATION OF HISTORIC RESOURCES WITHIN STUDY AREA

A review of relevant historical records, including the California Historic Resources Inventory (HRI) and files at the City of Huntington Beach indicates that the GWC campus has not been previously assessed for historical significance and no above-ground historic resources are located within the project site.

However, in February 2007, a program EIR was prepared to address implementation of the GWC Master Plan. The Cultural Resources section of the PEIR stated that there were no buildings over the age of 40 years old and, therefore, did not appear to qualify as historical resources. No applicable national or state significance criteria were considered or applied to the campus or its facilities in order to formal evaluate the historical significance or the identification of historical resources as defined by CEQA.[37]

Hence, for the purposes of this current assessment, the campus and its associated improvements have been formally re-evaluated for historical significance using National

[37] *State CEQA Guidelines, 14 CCR Section 15064.5(a).*



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SOURCE: ESRI 2013, Coast Community College Vision Plan 2012

FIGURE 3-1

Survey Study Area/Existing Conditions

Register and California Register criteria in order to identify any potential historic resources on the campus, as defined by the CEQA Guidelines.[38]

The current survey process was conducted per OHP methodology, which gives a 45-year old threshold for surveying properties for historical significance. Those properties that had a construction date of less than 45 years of age, constructed after 1970, were not documented unless they exhibited "exceptional" importance or were determined to be an integral part of the initial GWC master plan completed a few years after the 45-year period.[39]

1. Golden West College, 15744 Goldenwest Street

Master Plan and Architecture

The original design of the Golden West College campus was undeniably Modern. The form of each building was based upon a highly functional, precisely engineered modular approach that provided a remarkable degree of expandability and flexibility in accommodating anticipated growth in the student population. Campus architect and master planner William L. Pereira stated in early 1964 that the new institution was designed "to grow and change like a living organism, adapting itself over the years to unpredictable changes in the academic environment."[40] As directed by the District, WLPA initially planned the campus to eventually accommodate a student population of 10,000 or more.[41]

The desire for flexibility, a key term of postwar building, enhanced the popularity of new materials, construction methods, and configurations of plan design for educational facilities. Flexibility was both a desirable quality for the structural aspects of a building, embodied in open corridors, non-load-bearing partitions, and zoned ventilation and heating systems, but also included provisions for re-arranging interior features and spaces.

The original master plan depicts the entire campus divided into a grid of 40-foot squares arranged on a north-south axis. To achieve the desired degree of expandability and flexibility, WLPA devised a modular building system based upon this 40 x 40 foot constraint. Within each module, interiors could be quickly partitioned into any combination of spaces that could be extended not only horizontally but also vertically.[42] Under WLPA's plan, the basic design would consist of a post and lintel system of interlocking modules with concrete floors and pre-cast

[38] *Ibid.*

[39] *As defined in National Register Bulletin 15, p. 42.*

[40] *"College Designed to Grow with Population," Los Angeles Times, February 23, 1964, p. L13.*

[41] *Ibid.*

[42] *Ibid.*

concrete waffle-section ceilings.[43] Roofs were flat and covered with composition sheathing. In providing natural interior illumination, skylights were placed within various individual cells of the waffle ceiling.

On exterior elevations, space divisions within the modules were accomplished by using no-load-bearing and relocatable partitions to accommodate change and maximize flexibility. Each 40-foot section contained seven equally sized panels that enclosed the space. Panels consisted of a variety of materials including plaster-covered concrete, plate glass, jalousie windows, or door openings all of which could be removed, relocated, or added as desired. The modular frame itself was constructed using a post and lintel system of exposed precast concrete columns and beams. Providing a decorative element to the composition, projecting beam-ends were stepped and incised, with chamfered corners. Regularly spaced at the roof's edge along the preformed concrete beams were slightly projecting rectangular concrete downspouts.

Original plans and historic photographs confirm that the concrete posts for each module were reinforced with steel arranged in a spiral pattern. Because of the soft soil associated with this part of Huntington Beach, which previously consisted of peat bogs prior to being cultivated for beans and other crops, each post went as deep as necessary to reach bedrock. In some cases, this was over 60 feet.

In making the buildings completely expandable, and to provide a maximum of usable interior space, the mechanical and electrical distribution equipment would be located in separate "load centers." These monolithic two-story structures designed according to the basic 40 x 40 framework of columns and beams would be separated entirely from the academic buildings and connected to them by footbridges containing the duct system. Each load center would act as a distribution center for electricity, telephone, closed-circuit television, and restrooms. In addition, hot and chilled water was to be piped in open channels around the exterior of the academic buildings and then into unit ventilators for conversion into hot and cold air. The first phase of construction, or "increment," called for five of these load centers, with 10 more to be added as the campus grew.[44]

Of WLPA's approach, the *Los Angeles Times* wrote in February, 1964, "Other novel features of the plan include a wide raised promenade which provides the main avenue of pedestrian traffic and also contains the utilities – and a series of adroitly designed earth berms

[43] *"Buildings to Be Ready at New JC in 11966," Los Angeles Times, April 26, 1964, p. L11.*
[44] *Ibid.*

that screen the perimeter parking areas from the academic campus 'island.'[45] Altogether, plans were to accommodate 5,000 automobiles on the 109-acre site with provision for future double decking of the parking area if more space was required. Overall, GWC was designed to grow almost five times within its original site dimensions.[46] The master plan by Pereira provided placement of the buildings to create a cohesive campus right from the very beginning.[47]

A review of the original WLPA campus plan prepared by associate architect Blurock Ellerbroek & Associates and signed by the District's consulting architect and master planner William L. Pereira depicts the continuous grid of 40' x 40' square units in an exact north-south alignment. Each of the 12 initial buildings envisioned for Golden West College were placed within the grid according to the 40 x 40 arrangement. None of these buildings deviated in their footprint from WLPA's 40 square foot scheme.[48] Most surround the large central quad situated towards the southeast portion of the campus. The quad became the de facto center of Golden West College from which campus buildings and their locations would generally be identified. The WLPA master plan includes a circulation pattern of concrete walkways that unifies the original campus. Together, the buildings, walkways, and central quad create a sense of uniformity to the campus as realized in 1966.

Initially, as part of WLPA's plan to enhance the aesthetics of campus, many buildings featured a combination of in-ground planters, reflecting pools, and river rocks contained within shallow rectangular cutouts near perimeters. To soften the exposed concrete modular framework, Pereira also included in-ground planters at the base of concrete posts so that climbing vines with cascading foliage would cover the structure's prominent horizontal and vertical elements. Unfortunately, for reasons of cost and maintenance, over time most of the mature vines were taken out and not replaced. In addition, many of the river rocks were removed and, along with the reflecting pools, filled in with dirt. This has resulted in the palpable degradation of the carefully planned, lushly planted arbor effect Pereira intended for the modular buildings. Indeed, in those places where climbing cascading vines still exist such as the Communications building, its adjacent Load Center, and the Music building (each erected in 1966), the singular aesthetic sense of a verdant leafy pergola is clearly evident. As part of Pereira's landscape plan for the campus, he also adroitly incorporated earth berms that screened the perimeter parking areas from the academic campus "island."[49] Most of these

[45] *Ibid.*

[46] *"Photo Standalone 50 – No Title," Los Angeles Times, October 30, 1966, p L21.*

[47] *Ibid.*

[48] *The Community Center, was not completed until 1967.*

[49] *"College Designed to Grow with Population," Los Angeles Times, February 23, 1964, p. L13.*

berms still exist and surround portions of the core central campus along its eastern and southern boundaries.

The landscape architecture and environmental planning firm of Linesch and Reynolds of Long Beach was hired in 1966 for landscaping portions of the GWC campus.[50] They were reported to have designed a landscape development and planting plan to complement Pereira's modular design plan for the campus and his general landscape concept.[51] However, according to GWC historian and original faculty member John Wordes, the firm of Linesch and Reynolds was responsible only for the planting of trees in the campus quad.[52] In 2007, all of the original quad trees were removed due to disease apparently caused by the naturally damp local soil.[53] The remainder of the campus was landscaped by Max Sisneros who was the Director of Maintenance and Operations for the college from 1966 until 1983.[54]

Over the decades, Sisneros planted the majority of GWC's trees and shrubs, including the large, mature Moreton Bay Fig Trees located in the center median of the Gothard Street parking area.[55] Sisneros also decorated the campus with whimsical "old west"-themed objects in recognition of the school's mascot known as "The Rustler." He obtained antique farm equipment from nearby farms as they were residentially or commercially developed. One of Sisneros' best-known campus creations is the miniature mine tunnel complete with rail tracks and ore cars located near the original GWC library. Today, due to the efforts of Sisneros and others, a verdant park-like setting makes Golden West College a lovely oasis in Huntington Beach.

The original campus color scheme was orange, yellow, and rusty red. These colors were applied to exterior paneled surfaces, but not to the concrete modular frames, which remained unpainted and exposed. Interiors, including the initial furnishings, matched the exterior colors. Neither the original exterior colors nor the matching interiors remain.

[50] *"Landscapers Get Campus Project," Los Angeles Times, June 9, 1966, p. M30.*

[51] *Ibid.*

[52] *Interview with John Wordes, October 8, 2014. Wordes was appointed inaugural Chairman of Fine and Applied Arts by GWC President Boyce in 1966.*

[53] *Ibid.*

[54] *Interviews with John Wordes and current Director of Maintenance and Operations, Joseph Dowling. October 8, 2014. Also confirmed by Gerie Kirkpatrick in "History of Golden West College."*

[55] *Interview with John Wordes, October 8, 2014.*

CAMPUS CONSTRUCTION

From 1966 until 1979, each construction phase at Golden West College was assigned an "Increment," with Increment I corresponding to the initial buildings erected in 1966 and 1967. It appears that the increment numbering system was discontinued after Increment IX in 1979. Henceforth, new construction was not assigned a numerical building phase label.

Under Increment I, the first permanent structures to be erected on the campus in 1966 were Mathematics-Science, Forum One, Business & Social Sciences, Administration, Communications, Music, Student Center, Bookstore, Library & Multi-Media Center, Fine & Applied Arts, Men's Physical Education, and Women's Physical Education. The Community Center was built the following year in 1967 as the last component of Increment I.

The Administration building is situated at the south end of the quad. The two-story structure originally had a square footprint derived from four double-stacked 40-foot modules. A wide raised promenade that stretched 200 feet between the Administration building and the Business & Social Sciences building was known as GWC's "front door" because of its prominence at that strategic location. In 1978, most of the promenade was infilled to accommodate the westward expansion of the Administration building. In 1980, a large two-story U-shaped addition to the Administration building was constructed south of the existing building. The expansion included a second story exterior walkway and a bridge connecting the Administration and Business & Social Science buildings. While the infill had followed WLPA's plan, the new addition did not. Instead, a plaster veneer of simulated concrete beams and fascia, complete with projecting incised beam ends with chamfered corners, was applied to the courtyard facing elevations of the new wing. It appears that 1980 was the last year that any attempt was made to simulate the 1960s-era designs for new additions. Henceforth, new construction, additions, and building footprints would bear no resemblance to Pereira's original modular approach to the design of the Golden West College campus.

The Business & Social Science building located at the west end of the "front door" promenade consists of two stories of six modules arranged in a U pattern. There have been no additions to this building since it was erected in 1966. As noted, a second story bridge now connects it to the Administration building.

Forum One, a lecture hall situated at the southwest corner of the quad also constructed in 1966, consists of six two-story modules. Its primary entrance faces east. An original Load Center is adjacent to the southeast corner of Forum One. Neither structure has experienced major alterations.

When originally constructed in 1966, the Mathematics-Science building was the furthest west of the campus structures. L-shaped in plan, there were eight modules on each of its two stories. An adjacent Load Center was located near the building's northeast corner. In 1971, Mathematics-Science more than doubled in size as two stories of 15 modules each were erected on its north elevation. The addition included prominent exterior concrete staircases and perimeter second story walkways. All of the new construction followed WLPA's modular program.

The Student Center consists of a pair of diagonally positioned two-story buildings placed near the northwest corner of the original campus cluster. The seven module north building was built in 1966 with dining facilities as well as the four module south building, which includes the Campus Bookstore. They share a large paved courtyard partially sheltered by Pereira's open modular concrete framework that visually links the space to the adjacent structures. A two-story food service addition to the north building was completed in 1971 that followed WLPA's modular system.

East of the Student Center and Bookstore and connected by a full-height covered promenade is the original Boyce Library & Multi-Media Center. The promenade is similar in design to the front door promenade at the south end of the quad that was later infilled. Initially a two-story building of seven modules per floor, the Library & Multi-Media Center was substantially enlarged in 1976 on its east and north elevations (secondary elevations) according to the WLPA modular plan. A Load Center is situated at the building's northeast corner. The Library & Multi-Media Center was closed following the completion of the new Library/Learning Resource Center in 2011.

The Music building began as four modules arranged in a T plan at the northeast corner of the quad. The three module north portion was three stories and the one module south portion was one story. In 1976, a two-story addition to the building's north elevation designed according to the WLPA modular system was completed. It connected the two-story Telecommunications Center & Forum Two that had been built five years earlier in 1971.

Directly south of the Music building on the east side of the quad is the one-story, six module Communications building with its U-shaped footprint. The inner portion of the U faces east and contains a sunken seating area and a manicured lawn. There have been no additions. A noteworthy element is the lush climbing and cascading foliage that covers much of the concrete framework that separates the south and north elevations of the Music and Communications buildings, respectively. This was a key element of the original landscaping scheme that has since been removed from the perimeters of most of the campus buildings.

The one-story, two module type Counseling building just south of the Communications building was identified as "Administration" in the original plan. It has not been modified. A Load Center fronts the Counseling building on its west side.

The Increment I structures north of the original buildings that surround the quad include the Fine & Applied Arts, Men's Physical Education, and Women's Physical Education. The two-story, five module Fine & Applied Arts building would later be supplemented by a much larger Fine Arts building to its north erected in 1993. Located at the far north end of the campus, the original one-story Men's and Women's Physical Education buildings were separated by a large swimming pool. In 1971, both buildings were greatly expanded according to the WLPA modular scheme.

The last of the Increment I buildings to be constructed was the Community Center completed in 1967. Located between the Administration (now Counseling) building and the Gothard Street parking lot at the east end of the campus, the one-story, four module Community Center was square in plan. It was perhaps the most charming of Pereira's modular buildings. Historic photographs and original plans reveal that it was extensively glazed with numerous skylights within its waffle ceiling. The building featured a large open floor plan with its perimeter landscaped with shallow pools and in-ground planters surrounded by a covered walkway. In later years, the interior was divided into numerous smaller spaces, north and west elevations were pushed outward beneath the former walkway, and the pools infilled with soil. As a result, the loss of physical integrity has substantially diminished the building's aesthetic appeal.

In 1969, under Increment II, the Cosmetology and Health Sciences buildings were constructed. The irregular-shaped one-story Cosmetology building west of Fine Arts, and the one-story, nine module Health Sciences building south of Math Science both followed the WLPA modular plan. In contrast, the utilitarian Corporation Yard complex located near the campus' northwest corner that was built primarily to store and repair facilities equipment was not modular in design.

Numerous additions and new campus buildings were erected in 1971 under Increments III and V, all of which followed Pereira's initial modular plan. There were additions to the Mathematics-Science, Cosmetology, Food Service, and Men's and Women's Physical Education buildings, as well as the construction of the aforementioned two-story Telecommunications & Forum Two building. An enormous new Physical & Recreation Education Pavilion was erected just south of the Physical Education/swimming pool complex. The two-story, 10 modular Technology building with its O-shaped plan was erected west of the new Physical & Recreation Education Pavilion.

Among GWC's most monumental buildings is the Community Theater constructed in 1971 near the east end of campus. With its slender concrete posts raised two stories in height, the structure's verticality is accentuated by the plaster-covered panels that continue skyward through the waffle ceiling that shelters the entrance promenade. Full height, dark tinted glazing frames the panels on either side of the primary (south) elevation. This elegant design demonstrates the aesthetic possibilities afforded by Pereira's modular system.

In 1973, under Increment VI, the first major deviation from the original WLPA approach to constructing the college's modular buildings was implemented with the three-story Humanities building. Instead of requiring spiral rebar concrete columns to reach bedrock, a lower cost steel frame design utilizing sturdy I-beams was employed as documented in historic photographs. A thin layer of concrete veneer was then applied over the steel frame in creating round columns similar to those on the earlier buildings. Stunted decorative chamfered beam-ends were an attempt to mimic Pereira's original design. Although WLPA was responsible for the Humanities building's design, the plans and elevations were not signed by Pereira, unlike those prepared prior to 1973 by the firm. This suggests that Pereira was no longer the chief architect for the GWC campus. Also part of Increment VI was the 1,200-seat amphitheater constructed north of the Community Theater that same year.

A complete departure from Pereira's original modular approach occurred in 1974 under Increment VII with construction of the Trade-Industry 1 building (now Automotive/Diesel). It utilized a tilt slab construction method that was inexpensive and highly utilitarian without any aesthetic pretense. It was erected just west of the Technology building.

In 1976, under Increment VIII, there were additions made to the Math-Science, Music, and Library buildings first erected ten years earlier. A *Los Angeles Times* article from 1976 states that Pereira was again "retained to plan, design and supervise construction of the buildings."[56] However, the tilt slab KOCE Administration facility located east of the Fine Arts building erected that same year was not a WLPA design.

The unprepossessing Trade-Industry 2 (now Graphics & Publications, College Support Services, and Auto Body) appeared in 1978 as part of Increment IX. It also utilized a tilt slab construction method. Both Trade-Industry buildings 1 and 2 were designed by WLPA; however, as with the Humanities building, Pereira's signature does not appear on the plans.

In 1979, under Increment IX, an addition to the Health Sciences building first erected in 1969 was completed. This appears to be the last building and final year that Pereira's original

[56] *"Golden West Buildings," Los Angeles Times, April 10, 1976, p. H6.*

modular approach was employed for additions to existing modular buildings. Furthermore, it does not appear that WLPA itself had any involvement with Golden West College after 1979.

Three buildings illustrate the complete departure from Pereira's modular system in the 1980s. The one-story Criminal Justice Training Center (1981) southwest of the Administration building was constructed of concrete brick and thin sheets of molded steel. A glazed and scalloped façade characterizes the Center's northeast corner. The three-story School of Nursing & Health Services Building (2008) at the far south end of the campus features a complex exterior of various materials, textures, colors, solids and voids. And the imposing three-story Library/Learning Resource Center (2011) at the west entrance to GWC is a contemporary monolith of concrete and metal cladding with fenestration consisting of narrow slits or large plate glass windows.

The campus today is comprised of 38 buildings and a number of ancillary structures and facilities, most of which were constructed between the mid-1960s and the 1970s. Much of the GWC campus continues to be characterized by the preponderance of unadorned, concrete post and lintel modular buildings planned and designed by William L. Pereira & Associates.

SIGNIFICANCE EVALUATION

The Modernist designed Golden West College today with its concrete post and lintel modular buildings; planned circulation pedestrian walkways in and around a central quad; integrated earth berms; and overall siting, scale, and massing of improvements reflects many of the features and design principles specifically developed for the campus by Pereira in the early 1960s.

The central quad, the heart of the campus, is surrounded by these buildings with later construction that differed from the modular approach generally relegated to areas beyond the central core. Pereira's master plan for the GWC campus was entirely predicated on a north-south, 40 square foot grid. Initially, upon this grid were placed twelve unadorned concrete post and lintel modular buildings that were architecturally influenced by the Brutalist variant of Modernism emerging at that time. Within each module, non-load-bearing interior walls could be quickly partitioned into any combination of spaces desired. According to this plan, anticipated growth in the student population would be accommodated by simply adding modules vertically and/or horizontally, reorganizing interior or exterior walls, or by constructing new buildings following Pereira's modular approach. Hence, nine additional module type buildings were constructed on campus following Pereira's initial design concept and master plan. This architecturally innovative and highly flexible program designed by WLPA was

successfully implemented by Golden West College from 1966 until 1971, after which a non-uniform approach to new construction was adopted.

The desire for flexibility, a key term of postwar building and not unique to Pereira's master plan, was a desirable quality for GWC because it provided the ability to rearrange interior features and spaces within a modular structure. Unlike other higher educational facilities in Orange County, WLPA's 1964-1965 master plan for Golden West College was unique in the consistency of building design conferred by following a strict modular approach. This sense of uniformity was derived from those early identically engineered buildings that were constructed according to the strict 40 x 40 square foot modular plan upon the identically proportioned north-south campus grid. In contrast, WLPA's master plan for the University of California, Irvine of 1959-1964 was based upon a series of concentric circles with non-modular buildings that differed from each other in design and appearance. Only at the University of California, San Diego, with its Brutalist influenced central library completed in 1970, did Pereira utilize exposed reinforced concrete that appears to have been influenced by the modular design approach employed by the architect at Golden West College four years earlier.

As discussed above, the first major phase of the WLPA master plan occurred under Increment I with the construction in 1966 of the Mathematics-Science, Forum One, Business & Social Sciences, Administration, Communications, Music, Student Center, Bookstore, Library & Multi-Media Center, Fine & Applied Arts, Men's Physical Education, and Women's Physical Education buildings. The GWC Community Center, also part of Increment I, was completed in 1967. A continuation of Pereira's module designed master plan was soon implemented with Increments II, III, and IV from 1967 to 1971. Building under these phases included Health Science, Cosmetology, Forum II, Physical Education Recreation (Gymnasium), Technology, and Community Theater.

The Golden West College campus was purposely planned in incremental stages over a period of years. The central core of the campus physically and visually reflects the unity and cohesiveness envisioned by Pereira's design. Aesthetically, however, GWC's modular buildings are not especially pleasing because of their overall utilitarian design despite the decorative chamfered projecting beam-ends. Further, the original WLPA landscaping program to enhance the aesthetics of campus buildings was mostly abandoned over time, but for the earth berms. Specifically, the mix of planters, reflecting pools, and river rocks associated with many of the buildings are now gone. More poignantly, the climbing vines with cascading foliage designed to soften the harshness of the concrete "tinker toy" appearance of the buildings have been almost entirely removed. Without these landscaping elements, the aesthetic qualities of the modular buildings are further compromised.

Nonetheless, the core of the Golden West College campus possesses a significant concentration, linkage, and continuity of buildings, structures, landscape features, and walkways that are united historically, architecturally, and aesthetically by plan and physical development. As a result, this area is identified as a potential historic district, the GWC Campus Historic District. The district derives its importance from being a unified entity that visually conveys a sense of the overall historic environment and shares an interrelationship by arrangement, function, and plan. The sense of uniformity is principally derived from the 40 x 40 square foot grid upon which the equally sized modular buildings were precisely placed. In addition, its circulation pattern of concrete walkways unifies the original campus. This collection of improvements, including its buildings, structures, landscape, and walkways is also historically significant as they embody the distinctive characteristics of a particular property type, period of construction, and architectural expression. This district also reflects the overall initial master plan, design, and vision of master architect William L. Pereira. The period of significance for the historic district is 1966 to 1971. This span of time captures the initial master planning, design, and construction of Golden West College by William L. Pereira & Associates as well as those additions to the original buildings that followed the firm's modular system.

Contributors to the district are the majority of the buildings that were erected from 1966 to 1971 according to the WLPA modular program. Most of those improvements are located around or in the vicinity of the main campus quad area. They are: Mathematics-Science, Forum One, Business & Social Sciences, Administration, Communications, Music, Student Center, Bookstore, Library & Multi-Media Center, Fine & Applied Arts, Men's Physical Education, Women's Physical Education, and Community Center. Although there were additions to the original Mathematics-Science, Music, and Library & Multi-Media Center buildings in 1976, the additions carefully followed WLPA's original modular system which allowed for expansion. Landscape features of the district include some grid pattern paved walkways and their material, location, configuration, and design; central quad space; climbing and cascading vines planted at the base of concrete posts; concrete benches; and the surrounding earth beams. Also included as a contributing feature is the large square shape concrete block monument sign just south of the Admission & Records building that is inscribed with campus name and initial date of admissions which reads as follows: "Golden West College, 1966." Additional contributors constructed between 1967 and 1971 include Health Science, Cosmetology, Forum II, Physical Education Recreation (Gymnasium), Technology, and Community Theater.

Non-contributors to this identified historic district are those buildings that did not follow the original modular approach or buildings and features that were built after the 1966-1971 period of significance. They include the 1973 Humanities-Arts & Sciences building, which is of steel frame construction and not modular, and the 1974 Trade-Industry 1 addition (now Auto

Technology) with its non-modular, tilt-slab construction. After 1976, new construction did not follow the modular method; therefore, all post-1971 buildings are non-contributors.

The historic district identified within the GWC campus has been evaluated as eligible for listing in the California Register under Criterion 3 for architectural merit. Specifically, it embodies distinctive characteristics of a modular method of construction for an educational institution as realized in the mid-1960s, represents the work of master architect William L. Pereira, and represents a significant and distinguishable entity whose components may lack individual distinction (i.e. a district). Demonstrating exceptional significance for the district due to its date of construction is not necessary because the original buildings were designed in 1965 and completed in 1966. As such, the subject property as defined above is considered a historic resource pursuant to the CEQA Guidelines.

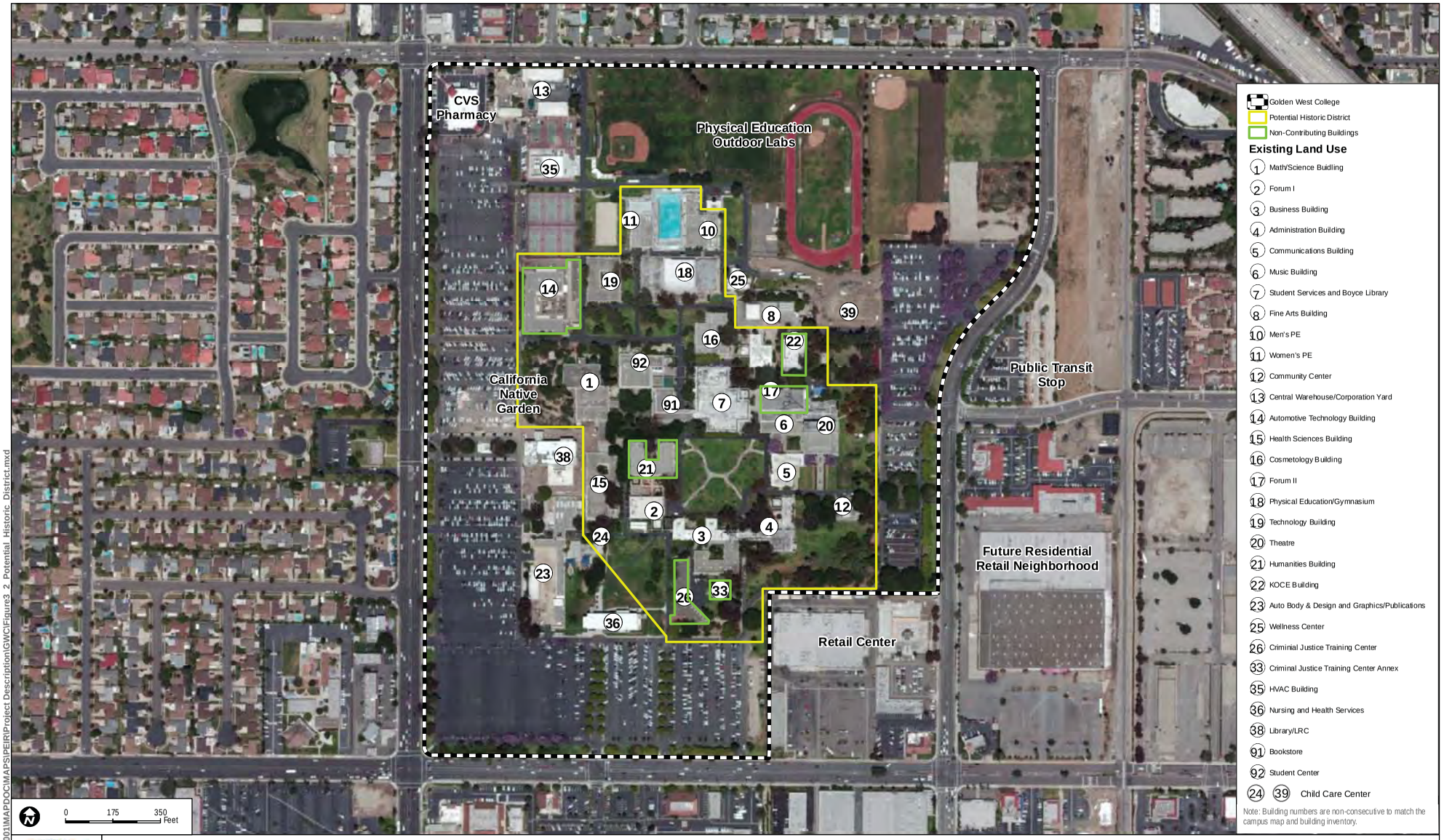
It does not appear that any of the GWC buildings are individually eligible for listing in the California Register because they all follow the same WLPA modular approach and none stand out as exemplary in comparison with the others. Indeed, this was precisely Pereira's intent. All of the campus buildings were to be consistent in design, construction, appearance, and expandability.

As relates to National Register eligibility, the GWC master plan, modular building design, and association with William L. Pereira do not appear to meet designation criteria at the federal level of significance as individual resources or as a potential historic district. Although technically interesting from a planning and engineering standpoint, neither the master plan nor the buildings were critically examined at the time of construction or since. In contrast, the University of California at Irvine, designed by Pereira at the same time as Golden West College, received extensive critical review in the early 1960s and in recent years and was found to be significant principally for its innovative master plan. Also, as relates to architectural merit, the original WLPA-designed buildings at UC Irvine, which were not based upon a modular system, have much more variety and vitality in their exterior appearance in comparison with those at GWC.

In terms of local landmark eligibility, the City of Huntington Beach does not currently have official criteria for local evaluation or designation of individual properties or for historic districts. Though the City has recognized a few properties as local landmarks through their General Plan, neither the Golden West College campus nor any of its buildings have been previously identified as potential historic resources by the City of Huntington Beach, its Historic Resources Board, or by any local survey efforts. Nonetheless, if such significance criteria and designation policies did exist in the City the GWC campus would appear eligible for local landmark designation as a potential historic district.

Table 3-1: Goldenwest College Campus Historic District Contributors/Non-Contributors

ID NO	Building Name/Campus Building #	Built	Historic District Status
1	Math Science (15)	1966	Contributor
2	Forum One (12)	1966	Contributor
3	Business Education (6)	1966	Contributor
4	Administration (4/5)	1966/66	Contributor
5	Communication (35)	1966	Contributor
6	Music (32)	1966	Contributor
7	Boyce Library (30)	1966	Contributor
8	Fine Arts and Gallery/Fine Arts (28)	1966	Contributor
8	Fine Arts Building (26)	1993	Non-Contributor
10	Men's Physical Education (22)	1966	Contributor
11	Women's Physical Education (23)	1966	Contributor
12	Community Center (1)	1967	Contributor
13	Corp Yard/Maintenance (20)	1967	Non-Contributor
14	Auto Technology (18)	1967	Non-Contributor
15	Health Science (11)	1969	Contributor
16	Cosmetology (27)	1969	Contributor
17	Forum II (31)	1971	Contributor
18	Physical Education Recreation (24)	1971	Contributor
19	Technology (19)	1971	Contributor
20	Theater (34)	1971	Contributor
21	Humanities (13)	1973	Non-Contributor
22	KOCE Space (29)	1976	Non-Contributor
23	Graphics & Publications (10)	1978	Non-Contributor
24	Child Care Center (8)	1979	Non-Contributor
25	Wellness Center (25)	1979	Non-Contributor
26/33	Criminal Justice (7)	1981/2001	Non-Contributor
27	Rehabilitation Center (21)	1986	Non-Contributor
35	HVAC/Central Plant (N/A)	2007	Non-Contributor
36	Nursing & Health Services (36)	2008	Non-Contributor
38	Library/LRC (38)	2011	Non-Contributor
39	Boys/Girls Club Child Development (39)	2011	Non-Contributor
91	Bookstore (16)	1966	Contributor
92	Student Center (17)	1966	Contributor
	Landscape/Hardscape Features, as noted herein	1960s	Contributor



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SOURCE: ESRI 2013, Coast Community College Vision Plan 2012

FIGURE 3-2

Potential Historic District

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4. ANALYSIS OF PROJECT IMPACTS

A. THRESHOLDS OF SIGNIFICANCE/CRITERIA FOR ADVERSE IMPACTS

1. CEQA GUIDELINES

The CEQA Guidelines state that a project involves a "substantial adverse change" when one or more of the following occurs:

- Substantial adverse change in the significance of a historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired.[57]

- The significance of a historical resource is materially impaired when a project:[58]

    a. Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources; or

    b. Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the Public Resources Code or its identification in a historical resources survey meeting the requirements of section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or

    c. Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

As such, substantial adverse effects may include, but are not limited to, physical destruction or damage to all or part of a historic property caused by vibration and/or sound;

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[57] *State CEQA Guidelines, 14 CCR Section 15064.5(b)(1).*

[58] *State CEQA Guidelines, 14 CCR Section 15064.5(b)(2).*

removal of the property from its historic location; isolation from or change of features within the property's historic setting; visual, atmospheric or audible intrusions; foreseeable effects that may occur later in time or farther removed in distance; and cumulative effects.

To be eligible for listing in the National Register and California Register, and as applied at the local level, a property must not only be shown to be historically significant under the applicable criteria (federal, state and local), but it must also have integrity. Integrity is defined as the ability of a property to convey its significance. Pursuant to CEQA, projects that may compromise the integrity of a property, and therefore, compromise its historical significance may be adverse.

The Secretary of the Interior's Standards for Rehabilitation (SOI Standards) are codified at 36 Code of Federal Regulations (CFR) Section 67.7. The SOI Standards are designed to ensure that rehabilitation does not impair the significance of a historic property. In most circumstances, the SOI Standards are relevant in assessing whether there is a substantial adverse change under CEQA. Section 15064.5b(3) of the CEQA Guidelines states in part that "... a project that follows the *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings* (1995), Weeks and Grimmer, shall be considered as mitigated to a level of less than a significant impact on the historic resource."

2. Secretary of the Interior's Standards for Rehabilitation

As stated above, projects that may affect historic resources are considered to be mitigated to a level of less than significant, if they conform to the SOI Standards. Projects with no other potential environmental impacts qualify for a Class 31 exemption under CEQA if they meet the SOI Standards.[59]

The definition of "rehabilitation" assumes that at least some repair or alteration of a historic property will be needed in order to provide for an efficient contemporary use or maintain its historic use. However, these repairs and alterations must not damage or destroy materials, features, or finishes that are important in defining a property's historic character and significance.

[59] *14 CCR Section 155331.*

The ten standards for rehabilitation are as follows:

1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.

2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces and spatial relationships that characterize a property will be avoided.

3. Each property will be recognized as a physical record of its time, place and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.

4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.

5. Distinctive materials, features, finishes and construction techniques or examples of craftsmanship that characterize a property will be preserved.

6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive historic feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.

7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.

8. Archaeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.

9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterized the property. The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale, and proportion, and mass to protect the integrity of the property and its environment.

10. New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

The SOI Standards were developed by the NPS to assist property owners and managers in rehabilitating their historic properties. The SOI Standards contain a specific hierarchy for decision-making in assessing the rehabilitation of any historic building. First, the significant materials and features of a property must be identified. Then a method for their retention and preservation must be found. If the physical condition of character-defining materials warrants additional work, repair is recommended. If deterioration or damage precludes repair, then replacement can be considered.

In addition to the rehabilitation of character-defining features, the SOI Standards also address alterations and additions to historic properties, as well as retrofitting properties for health and safety requirements. Some alterations to a historic property may be needed to assure its continued use; however, these modifications should not obscure or destroy important character-defining features of the property or jeopardize those qualities that justify or convey the property's historical significance.

B. PROPOSED PROJECT

GWC is proposing to implement the proposed project to more effectively meet the space needs of the projected on-campus enrollment through the year 2024 and beyond while constructing and renovating facilities in order to meet the District's instructional needs. The construction of new academic buildings, the renovation of existing buildings, and vehicular circulation enhancements would accommodate the projected increase in headcount student enrollment. New pedestrian walkways, service access roads, and open space areas in and around the campus would increase accessibility to the core of the campus.

The overall goal of the proposed project is to provide the optimal physical settings to support the District's academic mission. The intent of the proposed project is to develop modern teaching and learning facilities that would attract students to GWC while providing the physical resources necessary to support the educational process. Specific project-level components include buildings and facilities and site improvements for the GWC campus (see Figures 4-1, 4-2, 4-3, and 4-4).

1. BUILDINGS AND FACILITIES (NEW CONSTRUCTION)

The buildings and facilities proposed for new construction as a component of the project includes six improvements:

New Criminal Justice Training Center. The District proposes the demolition of the existing Criminal Justice Building at the south end of campus. A new complex would be constructed in the southeast corner of the campus in two phases, where the Community Services Building is currently located. The new building would replace the existing, out-of-date structure with one-story buildings and one building that would be two-stories in height.

New Math/Science Building. The construction of the new building would take place in the southwest corner of the campus. This building would replace the existing Math/Science Building currently located in the center of campus. Replacement of the current building would allow for infrastructure updates and would provide more classroom space.

New Language Arts Complex. The existing Humanities Building and Health Sciences Building located at the center of campus would be demolished and a new Language Arts Complex would be constructed at the same location. The new building would expand to the west. Classrooms for courses in the arts and letters would be offered in the new building.

New Cosmetology Building. Construction of a new Cosmetology Building would occur at the northwest corner of the campus, in the northern half of the existing tennis courts. The tennis courts would be replaced as part of the physical education outdoor lab renovation. The existing and outdated Cosmetology Building located in the core of the campus and west of the Fine Arts Building would be demolished.

New Business/Social Sciences/Administrative Office Building. This scope of work would entail the demolition of some smaller existing buildings to construct a larger, more efficient multi-use building. The new building would be located on the site of the existing Math/Science Building at the center of campus, which is proposed for demolition. This new building would replace the existing Administrative Building and the Business Building at the southeast corner of campus, both of which would be demolished.

One Stop Student Center. This scope of work involves the demolition of the existing Boyce Library for the construction of new buildings and would provide a centralized one-stop location for student services at the core of the campus. The project would be located at the center of the campus.

2. BUILDINGS AND FACILITIES (RENOVATION)

The buildings and facilities proposed for new construction as a component of the project includes four improvements:

Technology Building. The project involves the renovation of the existing Technology Building to correct building deficiencies and support current instructional needs. The building is located in the western portion of the campus.

Central Warehouse/Corporation Yard. The existing Central Warehouse/Corporation Yard in the northwest corner of the campus would be renovated and expanded.

Automotive Technology Building. The project also involves the renovation and expansion of the existing Automotive Technology Building to correct any building deficiencies and support current instructional needs. The expansion would occur in the southern half of the existing tennis courts in the western portion of the campus. The existing tennis courts would be replaced as part of the physical education outdoor lab renovation.

Physical Education Outdoor Labs. The District proposes the renovation of the existing facilities currently located in the northern portion of the campus to provide enhanced, state-of-the-art facilities. Recreational facilities, which would also be open for public use, would be included in the renovation.

3. BUILDINGS AND FACILITIES (DEMOLITION)

Approximately one dozen buildings and associated facilities are proposed demolition under the Vision 2020 Facilities Master Plan. Of that number, eight of the identified contributing buildings/features to the potential GWC Campus Historic District are proposed for removal. Portions of the existing landscape/hardscape features may also be affected directly or indirectly by the proposed project. The table on the following page summarizes those improvements proposed for demolition (see Table 4-1).

4. SITE IMPROVEMENTS ELEMENTS

Site improvements proposed include parking and vehicular entry, pedestrian circulation, and site infrastructure improvements.

Vehicular Entryways, Circulation, and Parking. The proposed project includes the enhancement of primary and secondary entries through consistent landscaping and signage. Pedestrian drop-off ones would be created at the end of the primary vehicular access entries on Edinger Avenue and Gothard Street. All parking lots would require additions such as lighting,

Table 4-1: Buildings and Facilities Proposed for Demolition

ID NO	Building Name/#	Built	Historic District Status
1	Math Science (15)	1966	Contributor
3	Business Education (12)	1966	Contributor
4	Administration (4/5)	1966	Contributor
7	Boyce Library Multi-Media Center (30)	1966	Contributor
12	Community Center (1)	1967	Contributor
15	Health Science (11)	1969	Contributor
16	Cosmetology (16)	1969	Contributor
21	Humanities (13)	1973	Non-Contributor
23	Graphics & Publications (10)	1978	Non-Contributor
24	Child Care Center (39)	1979	Non-Contributor
26/33	Criminal Justice (7)	1981/2001	Non-Contributor
	Landscape/Hardscape Features, as noted	1960s	Contributor

signage, parking ticket dispensers, and blue emergency phone kiosks. The parking lots on the south and west sides of the campus would require landscape renovations.

Pedestrian Entryways and Circulation. The existing pedestrian walkways are either asphalt roads or concrete walkways that share use with service vehicles. New walkways are proposed to improve pedestrian circulation. New primary and secondary walkways would begin at the parking lots on the west, south, and east sides of the campus and terminate at the center core of the campus. Walkways would be constructed around buildings so not as to impede students on their route to the center of the campus.

Service Access. Three service access roads are proposed by the District for the campus. The first service road would be from McFadden Avenue to the Central Warehouse/Corporation Yard. An additional road would begin at the primary entryway from the western parking lot and terminate at the Food Service/Printing area in the center of campus. The third road would begin at the primary entryway from the eastern parking lot to the Theatre/Arts area in the center of the campus.

Open Space. An urban street, garden, community arts plaza, student dining area, and multiple lawns and greens would be developed in the core of the campus to provide places for students, visitors, and staff to gather informally between classes. Lighting, signage, and street furniture would be added to these open spaces to create a welcoming environment.

Site Infrastructure. A thermal energy storage unit would be installed just north of the existing Central Plant area. This system would store energy to be used later for heating, cooling, or power generation. The storage tank volume would be approximately 116,000 cubic feet.

In addition, interior building modifications would be performed for the existing Music, Technology, Fine Arts, Forum I and II buildings, and the Automotive Technology Buildings. If the Administration Building is not demolished, this building would also include interior building improvement and modifications such as painting, carpeting, the replacement of damaged ceiling tiles, and minor electrical repairs, where applicable.

As part of the overall site improvements, the installation of security, access, and surveillance infrastructure would occur in the Administration (if not demolished), Admissions and Records, Automotive Technology, Technology, Bookstore, Communications, Financial Aid, Fine Arts, Forum I and II, and Music buildings, as well as the Maintenance/Receiving, Theatre, and Counseling Division buildings.

C. ANALYSIS OF PROJECT IMPACTS

The proposed project anticipates the demolition of several existing core campus improvements, including most of contributing properties and some noted landscape and hardscape features to the potentially eligible (California Register) GWC Campus Historic District.

The existing setting of the core campus area would be re-designed and re-configured in a manner that would destroy much of the original semblance of the historic character of the site and those qualities that convey the district's historical significance, period of significance, and eligibility for listing in the California Register. The demolition, re-configuration, and re-design of the district and its contributing resources, as proposed by the current project, would result in significant adverse impacts under CEQA. These impacts cannot be mitigated to a less-than-significant level unless redesign of the project occurs. Nonetheless, mitigation measures are still required.



SOURCE: ESRI 2013, Coast Community College Vision Plan 2012

FIGURE 4-1

Proposed Campus Land Uses

7910.0001

Golden West College Vision 2020 Facilities Master Plan Historic Resources Technical Report

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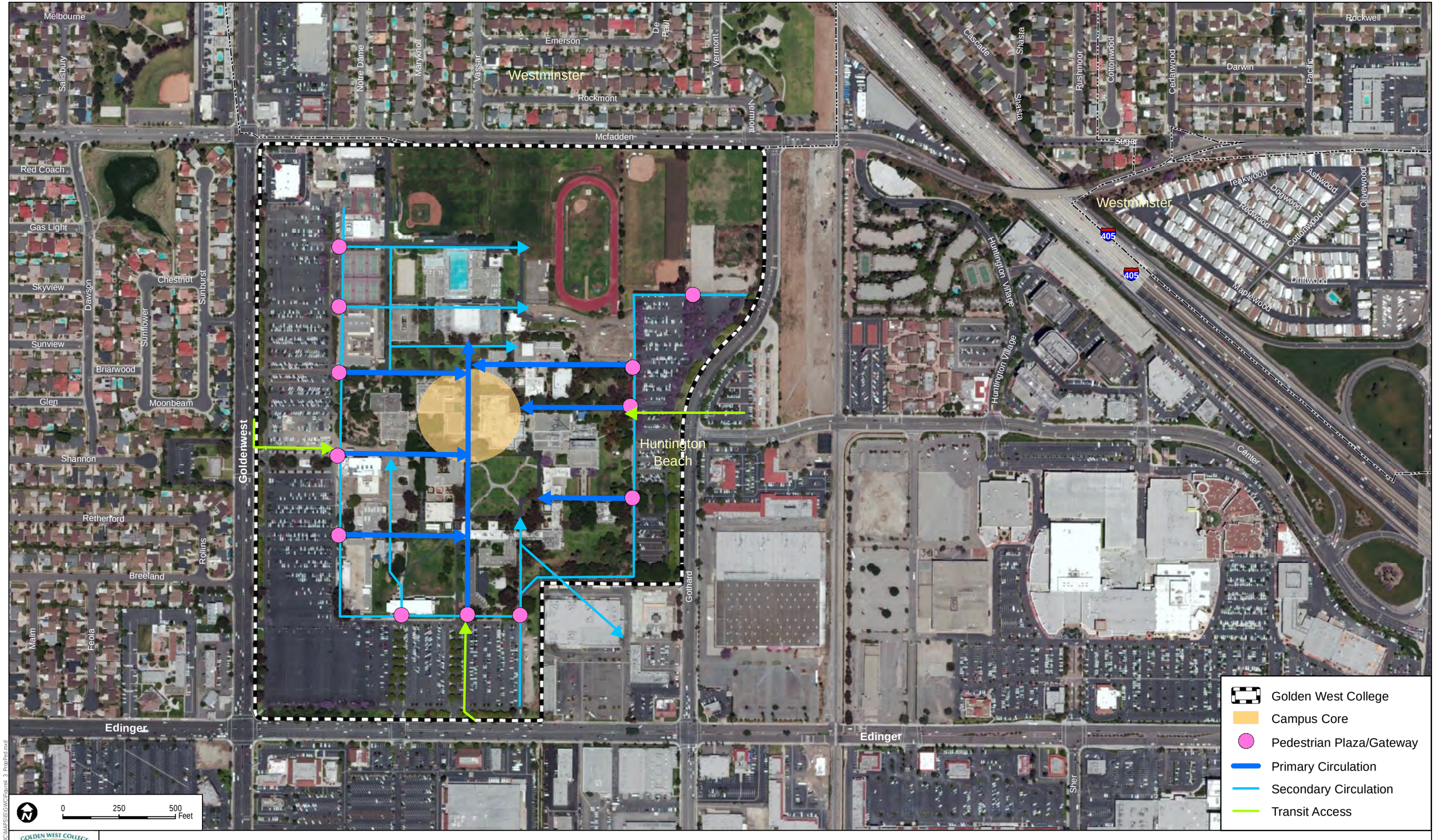
SOURCE: ESRI 2013, Coast Community College Vision Plan 2012

FIGURE 4-2

Proposed Vehicular Circulation Improvements



SOURCE: ESRI 2013, Coast Community College Vision Plan 2012

FIGURE 4-3

Proposed Pedestrian Circulation Improvements

7910.0001

Golden West College Vision 2020 Facilities Master Plan Historic Resources Technical Report



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SOURCE: ESRI 2013, Coast Community College Vision Plan 2012

7910.0001

FIGURE 4-4

Proposed Demolition

Golden West College Vision 2020 Facilities Master Plan Historic Resources Technical Report

5. MITIGATION MEASURES

A. CEQA MITIGATION APPROACHES

According to CEQA, mitigation may include:

- Avoiding the impact altogether by not taking a certain action or parts of an action;
- Minimizing impacts by limiting the degree or magnitude of the action and its implementation;
- Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment;
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action;
- Compensating for the impact by replacing or providing substitute resources or environments;[60] and
- Utilizing the Secretary of the Interior's Standards of Rehabilitation and Guidelines for Rehabilitating Historic Buildings.[61]

B. CONSIDERATION OF MITIGATION MEASURES

CEQA requires the Lead Agency to examine and impose mitigation measures or feasible project alternatives that would avoid or minimize any impacts or potential impacts to historic resources.

When identified historic resources are involved, avoidance or preservation in place is the preferable course of action. When total avoidance or preservation in place is not possible, a hierarchy of treatment approaches should be examined and assessed for feasibility. Such treatment approaches may include partial retention, relocation, or reconstruction. Demolition and recordation under CEQA are not considered acceptable treatment approaches as recordation does not address the adverse change resulting from the determination of the

[60] *CEQA Guidelines, Section 15370.*

[61] *CEQA Guidelines, Section 15064.5(b)(3).*

physical characteristics that justify the inclusion of the resource in the California Register and/or local landmark register, if such one exists.

C. PROJECT MITIGATION MEASURES

Under the proposed project, the majority of contributors to the identified GWC Campus Historic District would be removed for construction of new improvements, reconfiguration of circulation paths, and modifications to existing landscape features. In addition, many of the contributing buildings would also be renovated under the proposed project, which could affect their historic character and historical integrity.

The following mitigation measures shall be required to document the important history and architecture of the site and its overall historical association with the early development of the GWC campus. Note that even with the following mitigation measures, the identified adverse impacts caused by the implementation of the proposed project would not be mitigated to a less than significant level.

Recordation

Prior to any alteration, relocation, or demolition of any contributing buildings, structures, objects, features, or landscape elements located within the identified GWC Campus Historic District a Historic American Buildings Survey (HABS) Level II-like recordation narrative document shall be prepared by the applicant. The work shall be completed by a qualified historic preservation professional who meets the requirements of the U.S. Secretary of the Interior's Professional Qualifications for history, architectural history, and/or historic architecture (pursuant to 36 CFR 61).

The HABS-like document shall record the history of the campus and its associated contributing buildings and features as well as its contextual relationship to the overall development of the college and community. The physical condition of the district, both historic and current, should also be addressed in the document through the use of site plans; original as-built drawings, as available; historical maps and photographs, including aerial photos; digital photography; and written data and text. Any field photos and notes should also be included as supporting exhibit material. This documentation shall include at a minimum:

- A written historic and descriptive report completed in narrative format, including an architectural data form for each contributing resource.

- A site plan showing the location of each building. This site plan shall include a photo key.

- A sketch floor plan shall accompany each architectural data form.

- Digital format photographs in accordance with Historic American Buildings Survey (HABS) guidelines and standards. Views shall include contextual views, all exterior elevations, details views of significant exterior architectural features, and interior views of significant historical architectural features or spaces. Such photographs shall be logged, tagged, and collected onto a media storage device for safe archiving and copies provided to those repositories receiving the HABS-like finished document.

- Available historic photographs and historic and/or current as-built plans of the site and its contributing resources shall be reproduced digitally or photographically and included in the recordation document.

One original copy of the documentation reproduced on archival paper as specified above shall be assembled and offered to each of the following entities:

- One set shall be sent to the Southern California Information Center at California State University, Fullerton.

- One set shall be offered to and, if accepted, deposited in the archives of the Los Angeles Conservancy.

- One set shall be offered to and, if accepted, deposited in the archives of the University of California, Irvine.

- One set shall be offered to and, if accepted, deposited in the archives of the City of Huntington Beach Public Library.

- One set shall be offered to and, if accepted, deposited in the archives of The Huntington Library, Art Collections, and Botanical Gardens.

- One set shall be offered to and, if accepted, deposited with the William L. Pereira and Associates Records archives at the University of Southern California, USC Libraries Special Collections.

- One set shall be offered to and, if accepted, deposited in the archives of the Orange County Archives.

Interpretive Educational Program

To assist the students, faculty, parents, and other interested parties in understanding the early history of the GWC campus, an interpretive multi-media educational program and 3-D public art display shall be incorporated into the development of the reconfigured campus quad area and/or campus library. This interpretive program and public art work shall be developed with the assistance of a qualified architectural historian or historic preservation professional who satisfies the Secretary of the Interior's Professional Qualifications. Content and design of the interpretive program should be specific to the initial planning and design of the GWC campus by William L. Pereira in association with the District; specifically the architecture and historical development of the campus. The program/display may include but not be limited to: commemorative signage; plaques; enlarged and framed historic photographs; representative statues; salvaged materials; models; display of as-built plans and drawings; educational interactive CD software program; other relevant displays and exhibits; tours or events; and published information in the form of brochures, pamphlets, videos, electronic media, campus web site, etc.

6. Level of Significance After Mitigation

Under CEQA, the mitigation measures required herein would reduce, but not eliminate the significant impacts of the proposed project to the identified historic district and its contributing resources. The substantial demolition of the buildings, structures, objects, features, and landscape elements that comprise the GWC Historic District would result in a substantial adverse change to the historic property (the historic district) and the environment. The impact to the GWC Historic District cannot be mitigated to a less than significant level. Nevertheless, the measures outlined for documentation of the District, the salvage and reuse of significant character-defining features, and the development of an interpretative educational program(s) are important to assure that information regarding the historical development of the college campus, its association with master architect William Pereira, and its physical manifestation of Modern style concrete modular designed educational facilities are documented, retained, archived, and promoted.

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INTERVIEWS

Interview with Director of Maintenance and Operations, Joseph Dowling. October 8, 2014.

Interview with John Wordes, October 8, 2014.

APPENDIX

SUPPORTING EXHIBITS

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PHOTOGRAPHS and DRAWINGS

Except for aerial photographs and drawing renderings all black and white photographs included herein courtesy of The Getty Research Institute (Juluis Shulman Photography Archives)



PHOTO - 1: Aerial view of GWC campus (note earth berms surround campus), 1971.



PHOTO - 2: Aerial view of the GWC campus looking northwest, 1973.

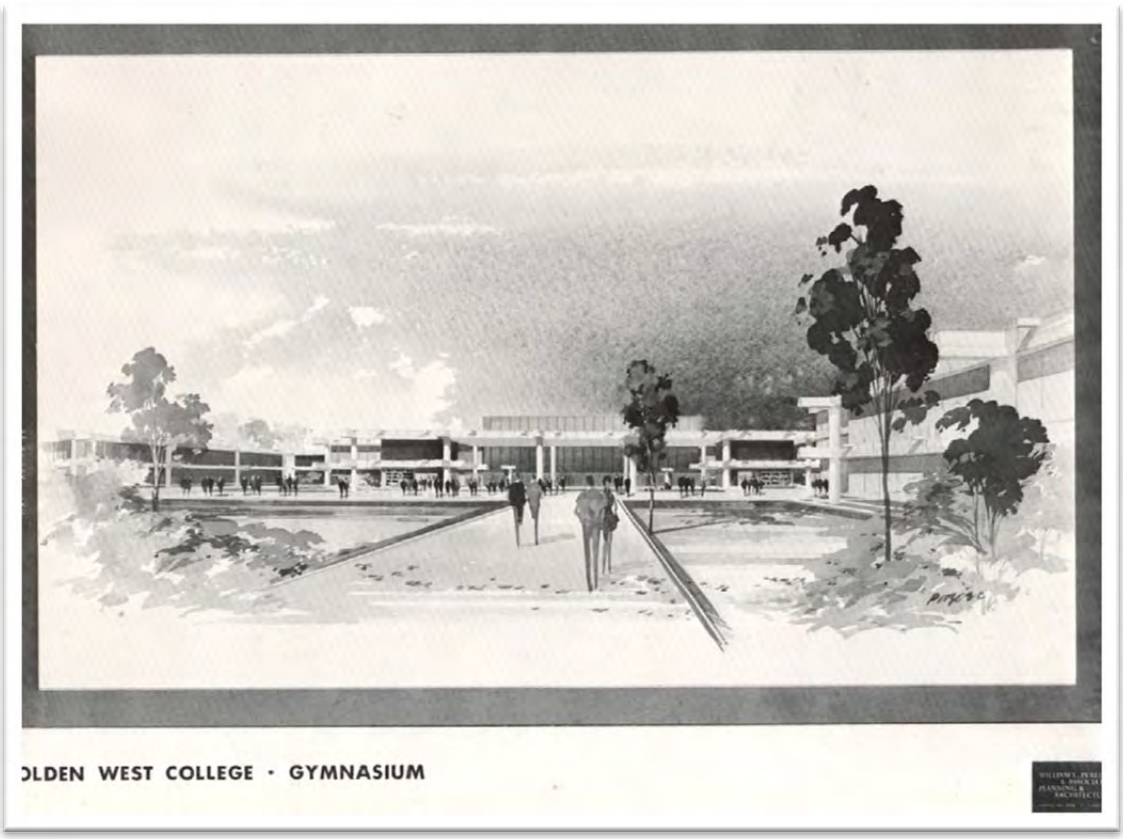

PHOTO - 3: Pereira rendering of Gymnasium, c.1968.



PHOTO - 4: Pereira rendering of Community Theater, looking northwest, c.1968.



PHOTO - 5: Administration building, 1966.



PHOTO - 6: Business Education building (left) with Administration (right), south elevation, 1966.



PHOTO - 7: Bookstore (left) and Study Center, looking west, 1966.

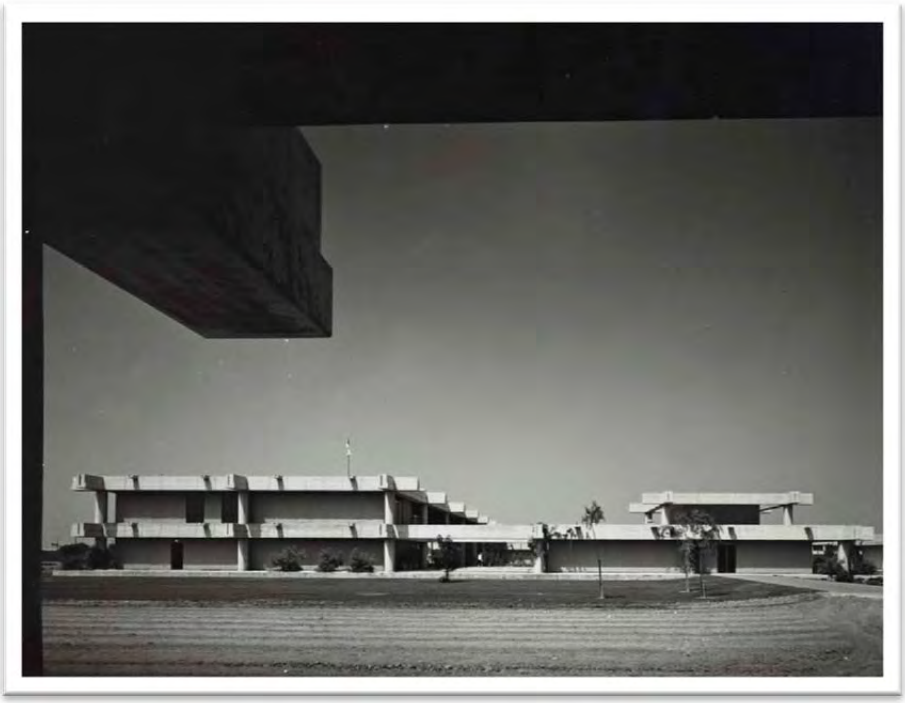

PHOTO - 8: Administration building, looking west, 1966.



PHOTO - 9: Gothard entrance into campus, looking northeast, 1966.



PHOTO - 10: Administration, looking east, 1966.



PHOTO - 11: Library (left) and Student Center (right), 1966.



PHOTO - 12: “Load Centers” detail, looking north (Communications and Music on right), 1966.



PHOTO - 13: “Load Centers” detail along with early landscape features, 1966.



PHOTO - 14: Communications, looking northeast, 1966.

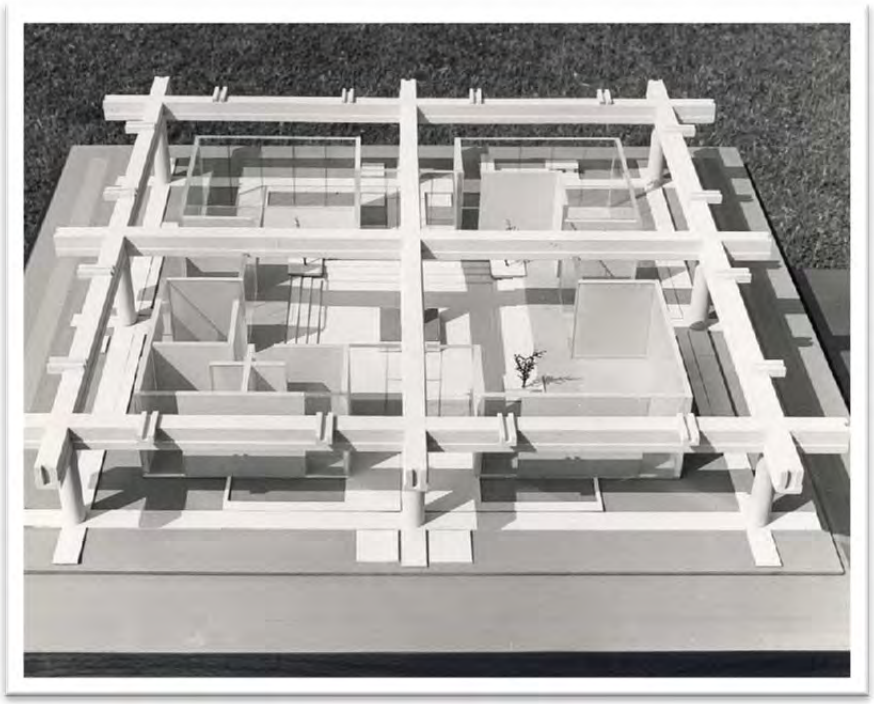

PHOTO - 15: Model, Community Center, 1966.



PHOTO - 16: Dedication ceremony adjacent Administration, 1966.



PHOTO - 17: Central court between Business and Admission & Records buildings, looking north, 2014.

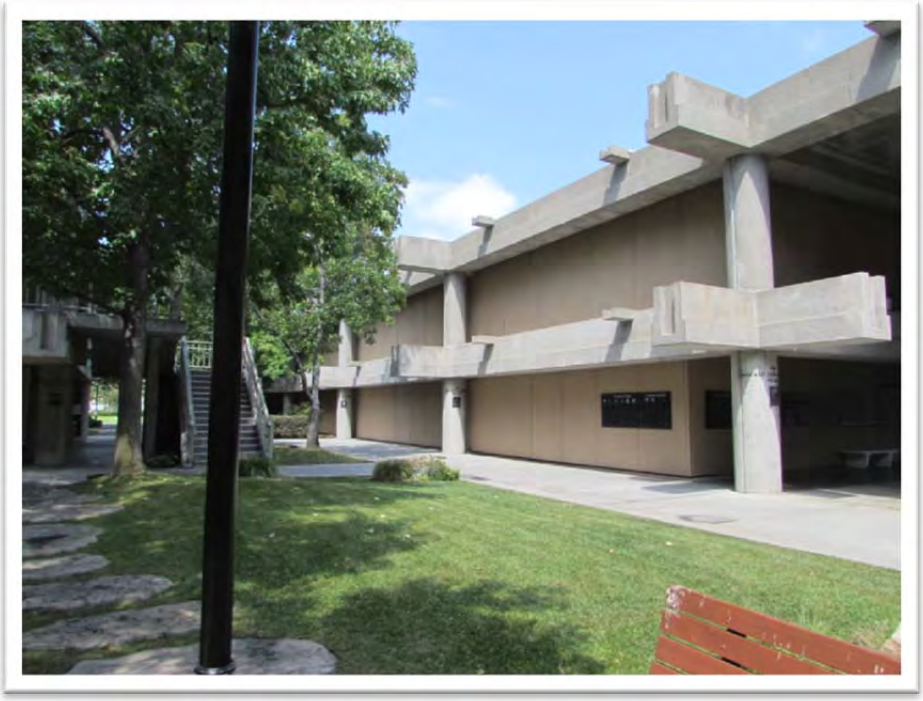

PHOTO - 18: Business building view from Administration courtyard, looking northwest, 2014.



PHOTO - 19: Administration (EOPS), east elevation, 2014.



PHOTO - 20: Community Center, looking southeast, 2014.



PHOTO - 21: Community Theater, looking northwest, 2014.



PHOTO - 22: Music building, southwest entrance, 2014.



PHOTO - 23: Communications rear courtyard, looking north, 2014.



PHOTO - 24: Men’s Physical Education building, looking northwest, 2014.



PHOTO - 25: Women's Physical Education building, looking northeast, 2014.



PHOTO - 26: Technology building, looking northwest, 2014.



PHOTO - 27: Technology building, inner courtyard entry detail, 2014.



PHOTO - 28: Gymnasium building (Technology left), looking north, 2014.



PHOTO - 29: Boyce Library entry court, looking east, 2014.



PHOTO - 30: Forum One, looking west, 2014.



PHOTO - 31: Pereira designed architecture details, 2014.



PHOTO - 32: Pereira designed architectural details, 2014.



PHOTO - 33: Earth berms at southeast side of campus, 2014.



PHOTO - 34: Earth berms along east of campus adjacent parking lot, 2014.



PHOTO - 35: Landscape/hardscape features, 2014.



PHOTO - 36: Landscape/hardscape features and architectural details, 2014.



PHOTO - 37: Forum One (east side) with sunken private study areas (foreground), 2014.



PHOTO - 38: Sunken private study area detail (there are several in this area), 2014.



PHOTO - 39: Campus main quad area, 2014.



PHOTO - 40: Dedication signage adjacent Administration, 2014.

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APPENDIX E

Cultural Inventory Memorandum

DUDEK

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October 23, 2013

Mr. Jerry Marchbank
Coast Community College District
1370 Adams Avenue
Costa Mesa, CA 92626

Subject: ***Negative Phase I Findings for the CCCD Vision 2020 Plan, Golden West College Project, Orange County, CA***

Dear Mr. Marchbank:

This letter documents the negative Phase I cultural resources inventory conducted by Dudek for the CCCD Vision 2020 Plan, Golden West College (GWC) Project (Project), located in the City of Huntington Beach, Orange County (Figure 1). The Project proposes select replacement and general renovations of existing college buildings, parking areas, and access roads. A South Central Coastal Information Center (SCCIC) records search indicates that no cultural resources have been recorded in the proposed project area. A Native American Heritage Commission (NAHC) Sacred Lands File (SLF) search does not suggest the presence of any sacred sites, traditional cultural properties (TCPs), or areas of stated cultural community importance. Native American tribal correspondence indicates that the area is culturally sensitive. Cultural pedestrian survey was conducted of the study area in accordance with the standards and guidelines defined by the California Environmental Quality Act (CEQA). No cultural resources were identified.

PROJECT DESCRIPTION AND LOCATION

The Coast Community College District (CCCD) is proposing construction of new facilities and renovations of existing facilities on the Golden West College (GWC) campus as a part of the CCCD Vision 2020 Facilities Master Plan (Project). The proposed modifications to the Golden West College include upgrades and repairs to existing buildings; construction of new facilities; and improvements to various parking, vehicular, and pedestrian circulations. The project is situated north of Edinger Avenue, south of McFadden Avenue, east of Goldenwest Street, and west of Gothard Street (Figure 2). The area of potential effect falls within Sections 13, 14, 15, 22, 23, and 24 of the Newport Beach and Seal Beach, USGS Quadrangles (Township 16S; Range 11W).

REGULATORY FRAMEWORK

CEQA requires that all private and public activities not specifically exempted be evaluated for the potential to impact the environment, including effects to historical resources. Historical resources are recognized as part of the environment under CEQA. It defines historical resources as "any object, building, structure, site, area, or place, which is historically significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California" (Division I, Public Resources Code, Section 5021.1(b)).

Lead agencies have a responsibility to evaluate historical resources against the California Register criteria prior to making a finding as to a proposed project's impacts to historical resources. Mitigation of adverse impacts is required if the proposed project will cause substantial adverse change. Substantial adverse change includes demolition, destruction, relocation, or alteration such that the significance of an historical resource would be impaired. While demolition and destruction are fairly obvious significant impacts, it is more difficult to assess when change, alteration, or relocation crosses the threshold of substantial adverse change. The CEQA Guidelines provide that a project that demolishes or alters those physical characteristics of an historical resource that convey its historical significance (i.e., its character-defining features) can be considered to materially impair the resource's significance.

The California Register is used in the consideration of historic resources relative to significance for purposes of CEQA. The California Register includes resources listed in, or formally determined eligible for some California State Landmarks and Points of Historical Interest. Properties of local significance that have been designated under a local preservation ordinance (local landmarks or landmark districts), or that have been identified in a local historical resources inventory may be eligible for listing in the California Register and are presumed to be significant resources for purposes of CEQA unless a preponderance of evidence indicates otherwise.

Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code SS5024.1, Title 14 CCR, Section 4852) consisting of the following:

1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States; or
2. It is associated with the lives of persons important to local, California, or national history; or
3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values; or

4. It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

SCCIC RECORDS SEARCH

A records search for the proposed project area and a surrounding half-mile was completed by SCCIC staff on August 27, 2013 (Appendix A). This search included their collection of mapped prehistoric, historical and built-environment resources, Department of Parks and Recreation (DPR) Site Records, technical reports, archival resources, and ethnographic references. Additional consulted sources included the National Register of Historic Places (NRHP), California Inventory of Historical Resources/CRHR and listed OHP Archaeological Determinations of Eligibility, California Points of Historical Interest, California Historical Landmarks, and Caltrans Bridge Survey information.

Previously Conducted Studies:

SCCIC records indicate that nine previous cultural resources investigations have been conducted within a half-mile of the proposed project area. Of these, four studies have included portions of the GWC campus (Table 1).

Table 1. Studies that have included project area

Author	Year	Company	Title
Ahlering, Michael L.	1973	Archaeological Research Inc	Report of a Scientific Survey and Inventory: Conducted for the City of Huntington Beach, California.
n.a.	1980	Archaeological Planning Collaborative	Historic Property Survey Huntington Beach Transportation Center, Orange County Transit District.
Mason, Roger D.	1987	Scientific Resource Survey Inc.	Research Design for Evaluation of Coastal Archaeological Sites in Northern Orange County, California.

Author	Year	Company	Title
Duke, Curt	2002	LSA Associates Inc.	Cultural Resources Assessment Cingular Wireless Facility No. Sc 100-02 Orange County, California

Previously Identified Cultural Resources:

SCCIC records indicate that no cultural resources have been previously identified within the proposed project area. Two prehistoric archaeological sites (30-000113 and 30-000162) have been previously recorded within a half-mile of the project boundary. The resource, 30-000113, is located 0.45 mile from the project site and consists of a prehistoric habitation and food processing site with organic-rich sediments, a small number of lithic tools (n=4) and marine shell. The distal portion of a human humerus was recorded on the surface within this area. The site was destroyed through construction of the 405 Freeway and subsequent development. The resource, 30-000113, is located 0.3 mile from the proposed project site and consists of a prehistoric habitation and/ or processing site with organic-rich sediments and a scatter of marine shell. The site has also been destroyed through subsequent development. Details relating to these sites are contained within Confidential Appendix A.

Thirteen above-ground (built-environment) historic resources (30-177182, 30-177183, 30-177184, 30-177185, 30-177186, 30-177187, 30-177188, 30-177189, 30-177190, 30-177191, 30-177192, 30-177193 and 30-177421) have been previously identified within a half-mile radius of the OCC campus (Appendix A). All of these historic-period resources have been previously evaluated; all have been found ineligible for NRHP, CRHR, or Local register designation. The SCCIC records search provided copies of three historic maps (map series). The 1896 USGS 15' Las Bolsas (updated 1941) and Santa Ana (updated 1901) Quadrangles do not suggest that any historical period resources are present within the current project area. A formal historical inventory is currently being conducted for the Project area; these results are pending and will be provided as part of a separate study.

NAHC SACRED LANDS FILE SEARCH

DUDEK requested a NAHC search of their Sacred Lands File on September 4, 2013 for the proposed project area. The NAHC provided results the two days later. This search did not indicate the presence of Native American traditional cultural place(s) within this area, or the surrounding one-mile buffer (Appendix B). The NAHC additionally provided a list of Native

American tribes and individuals/organizations that might have knowledge of cultural resources in or near the project area.

TRIBAL REPRESENTATIVE CORRESPONDENCE

Following the NAHC response, letters were sent to the listed tribal representatives with the intent of requesting information, opinions or concerns relating to the proposed project impacts (Appendix B). These letters contained a brief description of the planned project, reference maps, and a summary of the NAHC SLF search results. Andy Salas, Chairman of the Gabrieleno Band of Mission Indians/Kizh Nation, responded on September 20, 2013. Mr. Salas' e-mail response indicated that the "proposed project is within a culturally sensitive area". As such, Mr. Salas requests that a Native American monitor from this tribe be present during all ground disturbances. Rebecca Robles, with the Juaneno group United Coalition to Protect Panhe, responded to requests on October 28, 2013. Ms. Robles requests to be informed should unanticipated archaeological discoveries be made and encourages the use of designated open space as a viable option should mitigation for such cultural resources be required. There has been no additional correspondence with Native American representatives to date.

METHODS

Intensive Pedestrian Survey

The intensive pedestrian survey was conducted by Dudek archaeologist Nicholas Hanten on September 10, 2013 using standard archaeological procedures and techniques. All field practices met the Secretary of Interior's standards and guidelines for cultural resources inventory. Transects of 15-20 meters apart were utilized in areas that were not constrained by the presence of structures, vehicles, and other impediments.

No artifacts or archaeological features were identified within the proposed project area. Visibility was variable, allowing for nearly all of the ground to be observed along exposed areas and little-to-no visibility in areas obscured by pavement or grasses. Portions of the project area have been previously disturbed by mechanical grading, landscaping, road construction, drainage control, and general development. It is somewhat unclear as to the depth and character of past disturbances within some of these areas, most notably in the grassy areas that comprise the northeastern portion of the project parcel.

SUMMARY AND MANAGEMENT CONSIDERATIONS

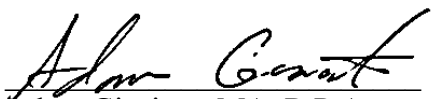
Archaeological Sensitivity and Mitigation Measures

Dudek's Phase I cultural resources inventory of the project area suggests that there is low-to moderate potential for the inadvertent discovery of cultural resources during ground breaking activities. The NAHC Sacred Lands File search did not indicate that cultural resources are in the vicinity of the project. Subsequent tribal correspondence with Mr. Salas, Chairman of the Gabrieleno Band of Mission Indians/Kizh Nation, suggests that the project is in a culturally sensitive area. SCCIC records indicate that no archaeological have been recorded within the project area, however, two prehistoric sites and 13 historic addresses have been recorded within a half-mile. A formal historic buildings assessment is not within the scope of the current inventory, however, recommendations relating to the structures on campus will be provided within a separate study

The northern-most project area is considered to have a low-to-moderate potential for encountering cultural resources based on its proximity to two prehistoric sites with sensitive and well developed cultural deposits, limited ground surface visibility within grassy areas, and a lack of information relating to the depth and character of past disturbances. For these reasons, archaeological monitoring is recommended. Additional correspondence should be conducted with tribal representatives to coordinate Native American monitoring. All monitoring, both archaeological and tribal, should be restricted to areas where archaeological material has the potential to be encountered. Monitoring is recommended to be unnecessary within portions of the project where past development has involved the removal or substantial disturbance of subsurface soils. Discussion between a qualified archaeologist and the contractor should be included during the project kick-off meeting regarding the integrity of the soil deposits within the proposed project area. Final recommendations relating to monitoring will be contingent on this discussion.

Should you have any questions relating to this report and its findings please contact me.

Respectfully Submitted,



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cc: *Rachel Struglia*
Micah Hale, Dudek

Att: *Figure 1. Regional Map*
Figure 2. Survey Map
Appendix A: Negative SCIC Records Search Information
Appendix B: NAHC Search Results and Tribal Correspondence


Project Site
Pacific Ocean
La Canada Flintridge
Altadena
Pasadena
Monrovia
Duarte
Arcadia
Azusa
Glendora
La Verne
Upland
Rancho Cucamonga
Fontana
Rialto
San Marino
San Gabriel
Temple City
Irwindale
Baldwin Park
Covina
San Dimas
Claremont
Alhambra
El Monte
West Covina
Pomona
Montclair
Ontario
Colton
Bloomington
Rosemead
Monterey Park
East Los Angeles
Montebello
Hacienda Heights
Industry
Walnut
Glen Avon
Mira Loma
Rubidoux
Pedley
Riverside
Vernon
Commerce
Rico Rivera
Rowland Heights
Diamond Bar
Chino
Chino Hills
La Habra Heights
Los Angeles County
Orange County
Whittier
South Gate
Downey
Santa Fe Springs
South Whittier
La Habra
Brea
Norwalk
La Mirada
Fullerton
Placentia
Yorba Linda
Norco
Corona
Woodcrest
Compton
Bellflower
Cerritos
Buena Park
Lakewood
Anaheim
Cypress
Carson
Long Beach
Los Alamitos
Garden Grove
Seal Beach
Westminster
Santa Ana
Tustin Foothills
Fountain Valley
Huntington Beach
Tustin
Irvine
El Toro Station
El Toro
Rancho Santa Margarita
Costa Mesa
Newport Beach
Laguna Hills
Mission Viejo
Coto De Caza
Aliso Viejo
Trabuco Highlands
Laguna Beach
Laguna Niguel
San Juan Capistrano
Dana Point
San Clemente
Orange County
San Diego County
Riverside County
Lake Elsinore
Camp Pendleton
0 5 10 Miles
Copyright © 2013 Esri
SOURCE: ESRI 2013
FIGURE 1
Regional Location
7910
GOLDEN WEST COLLEGE INITIAL STUDY



FIGURE 2
Local Vicinity

Appendix A:
Negative SCIC Records Search Results
CONFIDENTIAL

Appendix B:
NAHC Sacred Lands File Search and Tribal Correspondence
CONFIDENTIAL

APPENDIX F

Paleontological Resource Survey

PALEO SOLUTIONS
Paleontological and Archaeological Compliance and Consulting Services

PALEONTOLOGICAL RESOURCE SURVEY
GOLDEN WEST COLLEGE
CITY OF HUNTINGTON BEACH
ORANGE COUNTY, CALIFORNIA

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November 12, 2013

TABLE OF CONTENTS

1.0 INTRODUCTION 3

2.0 PROJECT LOCATION AND DESCRIPTION 3

3.0 METHODS 3

3.1 Records Searches 3

3.2 Literature Searches 3

3.3 Geologic Map Review 6

3.4 Field Survey 6

4.0 REGULATORY REQUIREMENTS 7

4.1 Federal Regulations and Laws 7

4.2 State and Local Regulations and Laws 7

5.0 RESOURCE ASSESSMENT CRITERIA 7

6.0 GEOLOGY AND PALEONTOLOGY 8

6.1 Geologic Overview 8

6.2 Young Quaternary Sedimentary Deposits (Qya, Qyf, Qyfc, Qyfs, and Qype) 10

6.3 Old Quaternary Sedimentary Deposits (Qoa and Qt) 11

7.0 RESOURCE ASSESSMENT 12

7.1 Preliminary Paleontological Sensitivity Classification of the Proposed Project Area 12

8.0 SURVEY RESULTS 12

9.0 POTENTIAL RESEARCH 13

10.0 IMPACTS TO PALEONTOLOGICAL RESOURCES 14

11.0 MITIGATION MEASURES 15

11.1 Procedures 16

12.0 REFERENCES 18

Appendix A: Natural History Museum of Los Angeles County Paleontological Records Search

Appendix B: Qualifications of Key Personnel

Figures

Figure 1. Overview of the Golden West College campus, outlined in red, located in the City of Huntington Beach, Orange County, California. 4

Figure 2. View west along Edinger Avenue toward the Golden West College sign at the southern end of the campus. Note the overall developed nature of this area of the City of Huntington Beach. 5

Figure 3. Stratigraphic relationship of younger alluvium, terrace deposits, and the San Pedro Sand, as they occur in Huntington Beach, and as referenced in the records search results by McLeod, 2013 (modified from Eisentraut and Cooper, 2002). 6

Figure 4. Geological map overlain on an aerial photograph of the Project area and surrounding region (from Morton and Miller, 2006; Saucedo et al., 2009). 9

Figure 5. Map showing the location of the City of Huntington Beach within the greater Orange County Coastal Plain of the Los Angeles Basin (Fram and Belitz, 2012). 10

Figure 6. Exposure of sedimentary deposits at the Avalon Bay development east of the Golden West College campus (view facing southeast). 13

Tables

Table 1. Rankings of units that are found underneath the Golden West College campus 12

1.0 INTRODUCTION

This paleontological assessment was prepared at the request of Dudek in order to evaluate paleontological resources for Golden West College located in the City of Huntington Beach, County of Orange, California (Project area) (Figure 1).

The study was performed in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code, §21000 et seq.), State CEQA Guidelines (California Code of Regulations, Title 14, §15000 et seq.), the County of Orange Guidelines, and the City of Huntington Beach General Plan (Eisentraut and Cooper, 2002; Huntington Beach, 1996). Ms. Sarah Siren, M.S., Project Manager/Principal Investigator (Paleontology), conducted the pedestrian survey, the institutional records search, and co-authored this report with Ms. Geraldine Aron, M.S. Report review was provided by Paul Murphey, Ph.D., and GIS mapping provided by Mr. Mark Deering. The goal of this report is to identify the level of paleontological sensitivity of the Project area, and make recommendations for the mitigation of adverse effects on paleontological resources that may result from the proposed construction.

2.0 PROJECT LOCATION AND DESCRIPTION

The Golden West College campus is an approximately 120-acre site located at 15744 Goldenwest Street, north of Edinger Avenue, west of Gothard Street, and south of McFadden Avenue, in the City of Huntington Beach, California. The campus can be accessed from either Goldenwest Street or Beach Boulevard from Interstate (I-) 405 (Figure 1). Shopping centers are located to the south and east of the Golden West College campus, with residential communities located to the north and west (Figure 2). The Project area, as seen on portions of the USGS Newport Beach and Seal Beach, California 7.5-minute Topographic Quadrangle maps, is located in section 14, Township 5 South, Range 11 West, San Bernardino Base and Meridian (USGS, 1965a,b; photorevised 1981).

The proposed development will involve improvements to the Golden West College campus, including construction of taller buildings and recreational facilities. Requisite improvements to existing infrastructure such as road expansion and inclusion of preservation areas will also accommodate the campus redevelopment.

3.0 METHODS

The paleontological study of the Project area included a review of regional geologic mapping and relevant reports, a literature search, an institutional records search, a review of previous paleontological investigations in the area and documented fossil-bearing localities, and an on-site field survey.

3.1 Records Searches

A paleontological records search was conducted by Samuel McLeod, Ph.D. of the Vertebrate Paleontology Section of the Natural History Museum of Los Angeles County (LACM). The results of the records search dated October 17, 2013, are attached (Appendix A).

3.2 Literature Searches

The literature reviewed included published scientific papers that were found at the library of the Biodiversity Research Center of the Californias, San Diego Natural History Museum; the Journal of Vertebrate Paleontology; and obtained on the internet from sources including the GeoRef, GeoPub, GeoTracker, Science Direct, and Web of Science databases.



Figure 1. Overview of the Golden West College campus, outlined in red, located in the City of Huntington Beach, Orange County, California.



Figure 2. View west along Edinger Avenue toward the Golden West College sign at the southern end of the campus. Note the overall developed nature of this area of the City of Huntington Beach.

As reported by McLeod (2013), several LACM fossil collecting localities are known from Quaternary deposits in Huntington Beach. They include LACM 65113, which is located west of the Golden West College campus, on Warner Avenue near Bolsa Chica Street. This locality yielded mammoth remains between depths of 6-8 feet below the topsoil, and extinct bison remains between 14-20 feet below the topsoil. South-southeast of the campus, and east of Beach Boulevard on Ellis Avenue, LACM localities 7657-7659 were discovered in sedimentary deposits of the Pleistocene San Pedro Sand (Figure 3). Fossil marine vertebrates recovered from this locality included: soupfin shark, skate, ray, angel shark, cusk eel, toadfish, queenfish, sculpin, goby, and sanddabs. These fossils were recovered from well cores drilled from over 100 feet below the ground surface (McLeod, 2013). A diverse assemblage of microvertebrates was recovered by screenwashing matrix samples from localities LACM 7366 and 7679, southwest of the intersection between Atlanta Avenue and Beach Boulevard. These fossils included sharks, bony fishes, frogs and toads, salamanders, turtles, snakes, lizards, birds, bats, moles, shrews, rabbits, and rodents (McLeod, 2013). Northwest of these localities, Pleistocene megafaunal remains, including mammoth, bison, and horse, were also discovered (LACM 7422-7425; McLeod, 2013). The closest locality, LACM 4018, is in fact a late Holocene age peat deposit from 4-8 feet below the surface at the intersection of Warner Avenue and Goldenwest Street, south of the Golden West Campus. Specimens recovered from this locality included invertebrates, reptiles, birds, rodents, horses, and deer (McLeod, 2013).

According to Jefferson (1991), Pleistocene-aged fossils have been found at shallow depths in deposits throughout southern California. Alluvial deposits of the same age have been documented during nearby development projects in Huntington Beach, and are presumed to underlie the younger sedimentary deposits mapped within the Project area, but at an unknown depth (Morton and Miller, 2006; Saucedo et al., 2009). Older marine Quaternary terrace deposits are visible in the bluffs above the East Garden Wintersberg Channel southwest of the Golden West College campus (McLeod, 2013). It is anticipated

that deposits of older Pleistocene sediments underlie the campus at depth, and these same age deposits are known to produce Ice Age fossils elsewhere in Huntington Beach.

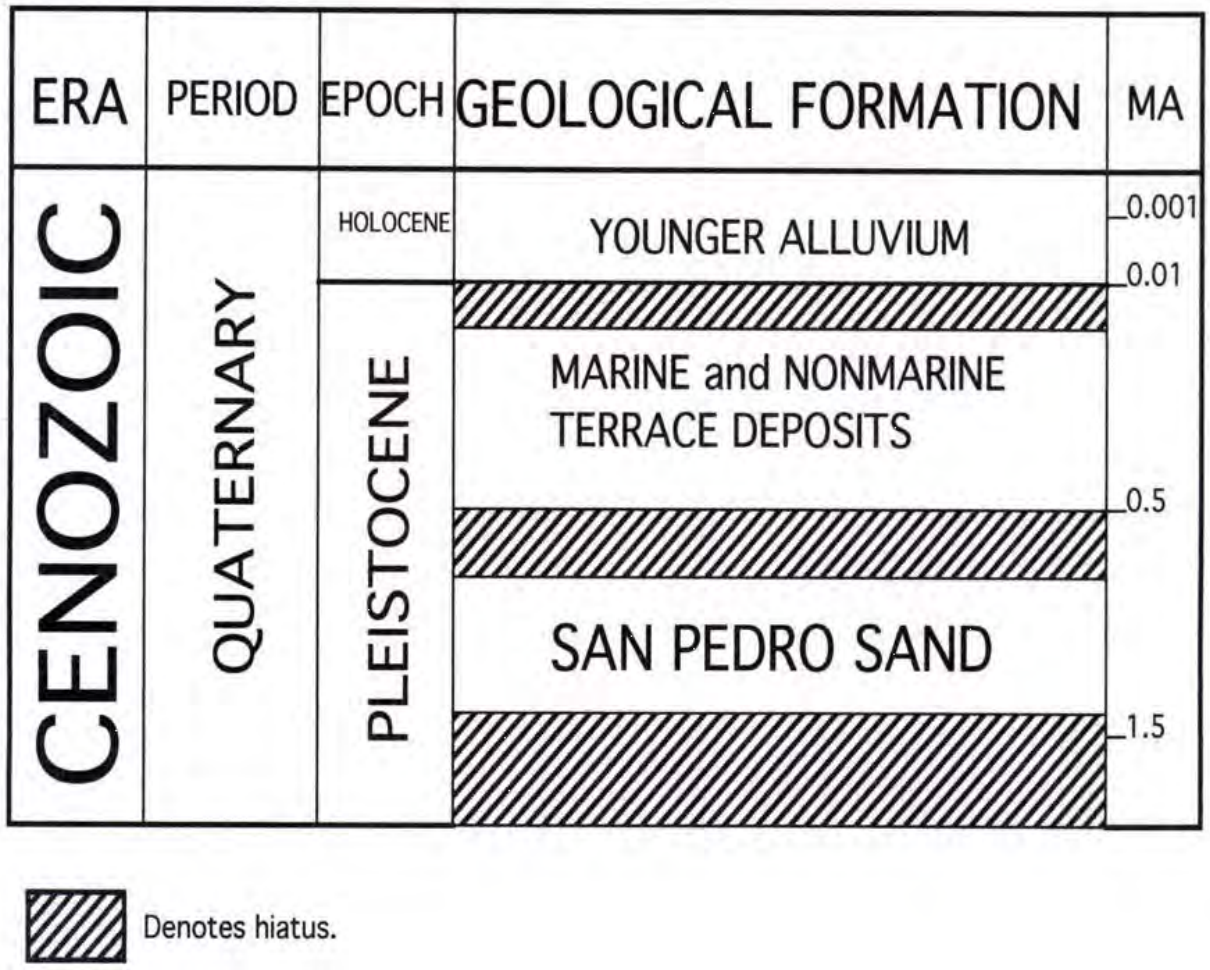

Figure 3. Stratigraphic relationship of younger alluvium, terrace deposits, and the San Pedro Sand, as they occur in Huntington Beach, and as referenced in the records search results by McLeod, 2013 (modified from Eisentraut and Cooper, 2002).

3.3 Geologic Map Review

Paleo Solutions, Inc. (Paleo Solutions) reviewed both published geologic mapping and unpublished reports for the area as part of this assessment (Saucedo et al., 2013; Morton and Miller, 2006).

3.4 Field Survey

A pedestrian survey of the property was conducted on October 29, 2013, by Ms. Siren. The survey included both an examination of outcrops for surface fossils and an assessment of the potential for occurrences of subsurface fossils. Scattered brush and the developed nature of the campus made it difficult in some areas to interpret the surficial geology and paleontological potential (Figure 3).

4.0 REGULATORY REQUIREMENTS

This section of the report presents the regulatory requirements that will apply to the project.

4.1 Federal Regulations and Laws

There are no federal regulations related to paleontological resources that apply to the project.

4.2 State and Local Regulations and Laws

The procedures, types of activities, persons, and public agencies required to comply with the CEQA are defined in the *Guidelines for Implementation of CEQA* (State CEQA Guidelines), as amended on March 18, 2010 (Title 14, Section 15000 et seq. of the California Code of Regulations [i.e., 14 CCR Section 15000 et seq.] and further amended January 4, 2013. One of the questions listed in the CEQA Environmental Checklist is: "Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?" (State CEQA Guidelines Section 15064.5 and Appendix G, Section V, Part C).

The *County of Orange General Plan* by Eisentraut and Cooper (2002)—based on the Society for Vertebrate Paleontology (SVP) recommendations—is used in part because it provides a convenient and locally useful way to address the paleontological sensitivity of formations. The formations that occur within Orange County have been assigned a sensitivity ranging from very high to none (Eisentraut and Cooper, 2002). The City of Huntington Beach General Plan, specifically the Historic and Cultural Resources Element (1996), provides an outline for the protection and preservation of resources.

5.0 RESOURCE ASSESSMENT CRITERIA

According to the County of Orange Curation Guidelines (Eisentraut and Cooper, 2002), impacts to paleontological resources range from zero to very high depending upon the resource sensitivity of the impacted geologic formations. The specific criteria applied for each sensitivity category are summarized below.

Very High Sensitivity

Very high sensitivity is applied to sedimentary deposits that yield scientifically very significant fossils, that give us insight into a particular time period, and those fossils which are very important for research. Formations that are included in this category are: the Capistrano Formation, the Monterey Formation, the Topanga Formation, the Sespe Formation, and southern Orange County exposures of the Santiago Formation (Eisentraut and Cooper, 2002). None of the units underlying the Project area are considered to have a very high paleontological sensitivity.

High Sensitivity

High sensitivity is assigned to geologic formations known to contain paleontological localities with rare, well-preserved, critical fossil materials for stratigraphic or paleoenvironmental interpretation, and fossils providing important information about the paleobiology and evolutionary history (phylogeny) of animal and plant groups. Generally speaking, highly sensitive formations produce vertebrate fossil remains or are considered to have the potential to produce such remains. Geologic units that have been assigned a high paleontological resource sensitivity that crop out elsewhere in Huntington Beach include the Pleistocene Old Paralic Deposits (also referred to as terrace deposits). These high sensitivity sedimentary deposits include the Pleistocene age marine and non-marine terrace deposits (older alluvium) that are presumed to underlie younger, Holocene age deposits mapped within the Project area.

Moderate Sensitivity

Moderate sensitivity is assigned to geologic formations known to contain paleontological localities with poorly preserved, common elsewhere, or stratigraphically unimportant fossil material. The moderate sensitivity category is also applied to geologic formations that are judged to have a strong, but unproven potential for producing important fossil remains. Geologic deposits that have been assigned a moderate paleontological resource sensitivity that are documented in the City of Huntington Beach include the San Pedro Sand (McLeod, 2013; Eisentraut and Cooper, 2002).

Low Sensitivity

Low sensitivity is assigned to geologic formations that, based on their relatively youthful age and/or high-energy depositional history, are judged unlikely to produce important fossil remains. Typically, low sensitivity formations produce poorly-preserved invertebrate fossil remains in low abundance. Due to the young age and coarse-grained nature of younger alluvium, these surficial sedimentary deposits are generally considered to have little potential to yield scientifically significant fossils. However, on occasion deeper excavations into sedimentary deposits mapped as younger alluvium penetrate into alluvial deposits of Pleistocene age and do yield fossils. Although sedimentary deposits of younger alluvium are assigned to none within the County of Orange Guidelines, due to the proximity of a late Holocene locality (LACM 4018), for the purpose of this report, these younger alluvial deposits are considered to have a low paleontological resource sensitivity.

None Sensitivity

Sedimentary deposits designated as having no sensitivity is assigned to geologic formations that are entirely igneous in origin (i.e., plutonic and/or volcanic), and therefore have no potential for producing fossil remains. Volcanic ash deposits can represent an exception to this general rule and preserve fossils as both body fossils or natural casts. Artificial fill materials are also assigned a paleontological resource sensitivity of none.

6.0 GEOLOGY AND PALEONTOLOGY

6.1 Geologic Overview

The Project area is the campus of Golden West College, in the City of Huntington Beach, California (Figure 1). This portion of Orange County lies within the Coastal Los Angeles Basin of southern California (Fram and Belitz, 2012) (Figure 5). Surficial deposits within the campus are entirely mapped as young Quaternary sedimentary deposits (Holocene; 10,000 years or younger). These Recent deposits are relatively flat-lying in this developed portion of Huntington Beach, southwest and adjacent to the I-405 (Morton and Miller, 2006; Saucedo et al., 2009; shown on maps as the designation Qya, Qyf, Qyfc, Qyfs, and Qype) (Figure 4).

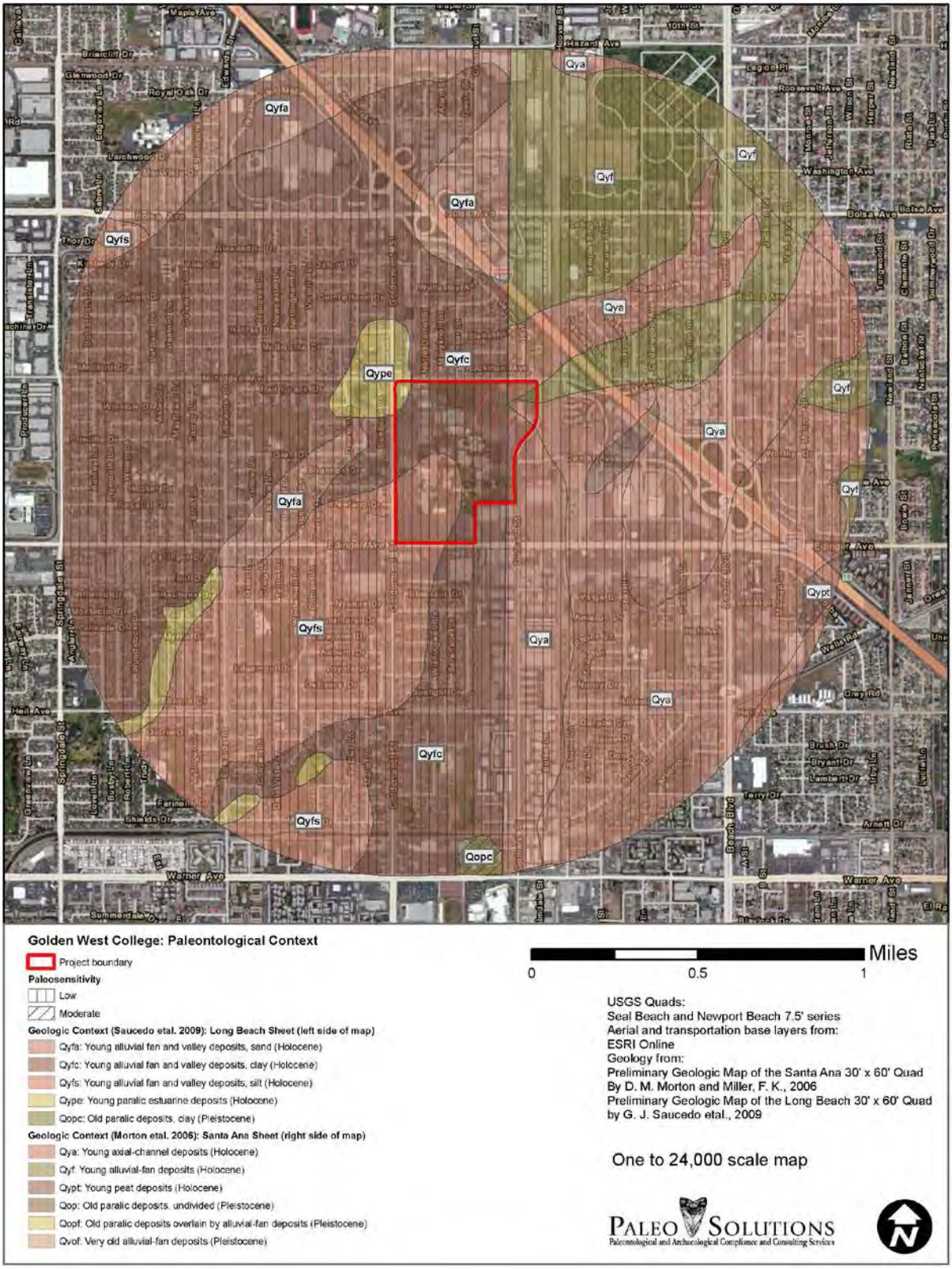

Figure 4. Geological map overlain on an aerial photograph of the Project area and surrounding region (from Morton and Miller, 2006; Saucedo et al., 2009).

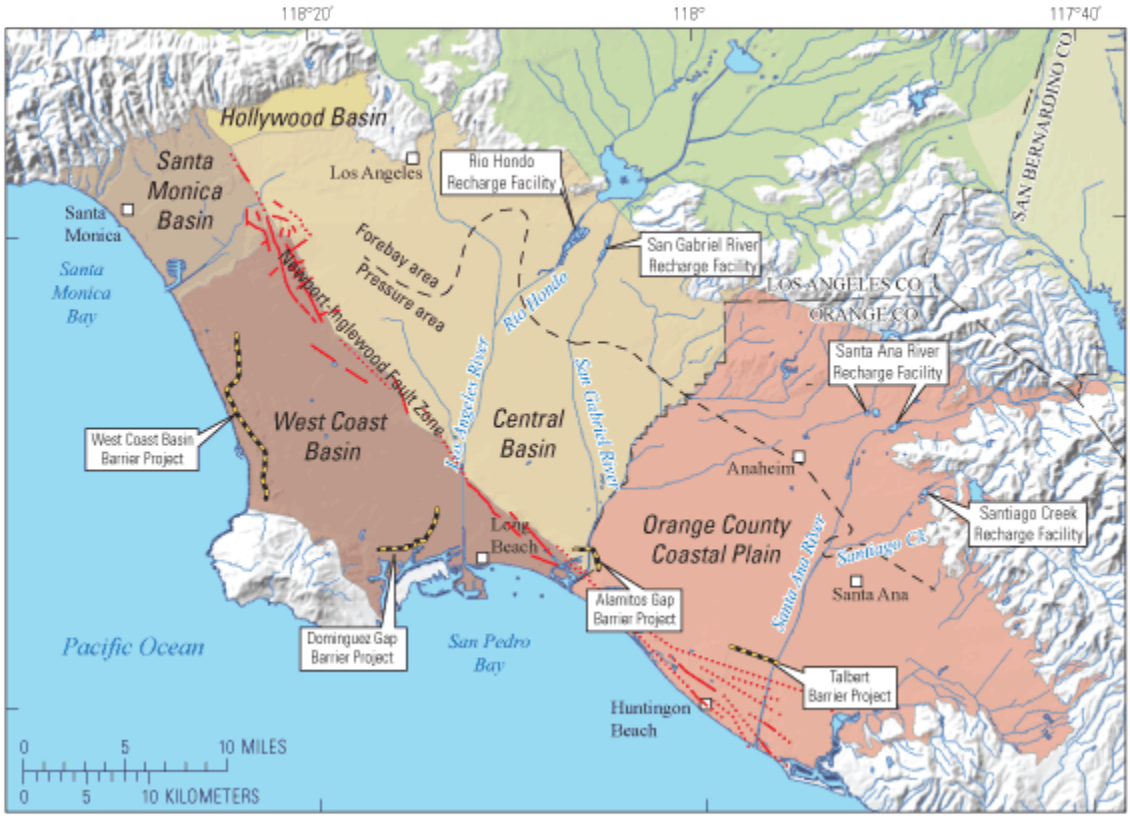

Figure 5. Map showing the location of the City of Huntington Beach within the greater Orange County Coastal Plain of the Los Angeles Basin (Fram and Belitz, 2012).

6.2 Young Quaternary Sedimentary Deposits (Qya, Qyf, Qyfc, Qyfs, and Qype)

6.2.1 Description

According to Saucedo and others (2009) and Morton and Miller (2006), the Golden West College campus is entirely underlain by young Quaternary sedimentary deposits of Holocene and late Pleistocene age. These deposits are further subdivided within the Golden West College campus as: paralic estuarine deposits (Qype, late Holocene), young alluvial fan and valley deposits (Qyf, Qyfc, and Qyfs); Holocene and late Pleistocene), and young axial-channel deposits (Qya; Holocene and late Pleistocene) (Morton and Miller, 2006; Saucedo et al., 2009). The paralic estuarine deposits located in the northwest corner of the Golden West College campus are "unconsolidated estuarine deposits…composed mostly of fine-grained sand and clay." These sedimentary deposits are similar to the brackish, coastal environment that we see today in the nearby Bolsa Chica Ecological Reserve. Young Quaternary deposits were noted at the surface of the Project area during the pedestrian survey and at the residential development for Avalon Bay east of the Golden West College campus (Figure 4). Visible in a trench excavation at the Project area east of Gothard Street were unconsolidated, light brown silts and sands (Figure 6).

6.2.2 Paleontology

No fossils are known from these young alluvial deposits in the area and their young age indicates that they do not contain in-situ paleontological resources. Because of the young age and/or disturbed nature of these deposits they are assigned a low paleontological resource sensitivity.

6.3 Old Quaternary Sedimentary Deposits (Qoa and Qt)

6.3.1 Description

According to McLeod (2013), older Pleistocene age deposits (e.g., Qoa and Qt) may be encountered at an unknown depth below surface deposits of Holocene age. These Pleistocene age deposits (less than 500,000 years old) were derived from local streams draining from the surrounding mountains (Morton and Miller, 2006). Terrace deposits, both marine and non-marine, of Pleistocene age, may also be encountered at unknown depths below younger alluvium.

6.3.2 Paleontology

Although these Pleistocene geologic units are not mapped at the surface within the Project area, they are mapped nearby, and have been assigned a high sensitivity based on their potential to yield significant, Ice Age mammals elsewhere in Huntington Beach (McLeod, 2013) (Appendix A).

Scientifically significant paleontological resources have been recovered from correlative Pleistocene older alluvial deposits throughout southern California and include fossil plants, invertebrates, and mammals (ground sloth, rodents, horse, tapir, camel, deer, llama, mastodon, and mammoth) (Jefferson, 1991). Old Pleistocene age deposits, although not visible at the surface during the pedestrian survey, have the potential to yield significant paleontological resources, and have been assigned a high paleontological resource sensitivity (McLeod, 2013) (Appendix A).

7.0 RESOURCE ASSESSMENT

According to the records search (McLeod, 2013), there are no documented fossil localities within a one-mile radius of the project boundaries. The Holocene age alluvial deposits that are mapped across the Project area have a low potential to contain paleontological resources. However, older, Pleistocene age sedimentary deposits nearby have produced LACM localities (McLeod, 2013; Appendix A), and these deposits underlie the Project area at a shallow depth. Such deposits have yielded the fossilized remains of mammoths, extinct bison, extinct horses, among others (McLeod, 2013).

7.1 Preliminary Paleontological Sensitivity Classification of the Proposed Project Area

The following table is generated using the County of Orange guidelines (Eisentraut and Cooper, 2002) and the currently available geologic mapping. Based on the results of the literature and museum records searches, the geologic formations in the Project area are individually ranked (Table 1).

Table 1. Rankings of units that are found underneath the Golden West College campus

Unit Group	Map Abbreviation	Age	Typical Fossils	SensitivityRanking
Young Quaternary Sedimentary Deposits	Qya, Qyf, Qyfc, Qyfs, and Qype	Holocene (Recent)	None	Low
Old Quaternary Sedimentary Deposits	Qoa, Qt, and/or similarly aged deposits	Pleistocene	Ice Age Mammals	High

8.0 SURVEY RESULTS

On October 29, 2013, the areas of impact that had the potential to impact paleontologically sensitive sediments during construction were surveyed. Particular attention was paid to exposed ground surfaces and areas of recent excavation on the Golden West College property.

Construction for the development is unlikely to impact paleontologically sensitive sediments, as the entire area is underlain by relatively shallow Recent sedimentary deposits that are too young to contain significant fossil remains (Morton and Miller, 2006; Saucedo et al., 2013) (Figure 5). However, old alluvial deposits, potentially at depth, may occur within the Project area, and have the potential to yield paleontological resources.



Figure 6. Exposure of sedimentary deposits at the Avalon Bay development east of the Golden West College campus (view facing southeast).

9.0 POTENTIAL RESEARCH

Construction activities for the Project have the potential to impact deeper sediments that may contain scientifically important fossil remains in areas where buried native sediments are disturbed. Because such a large portion of California is urbanized and covered by development or agriculturally disturbed, opportunities to collect new fossils and paleontological data from Pleistocene age sediments are largely restricted to construction projects that disturb these sediments and reveal the fossils that are preserved in them.

The fossils found in older alluvium in California provide critically important paleoecological and paleoenvironmental data. They provide direct evidence of the composition and phylogenetic diversity of the Pleistocene biota, paleobiologic features of individual taxa, and evolutionary relationships of the fauna and flora through time. In combination, the fossil assemblages at individual localities, together with the sediments in which they are preserved, also provide indirect evidence of the nature of Pleistocene climates and environments, and importantly, the geographic distributions of different paleoenvironment types such as the fluctuating ocean shorelines, locations of inland lakes and swamps, upland habitats, and lowland habitats such as basin floors. It is important to bear in mind that the type and scope of research that can be accomplished for a paleontological construction mitigation project is entirely dependent upon the types and numbers of fossils that are discovered and their sediment logical context. If no fossils are discovered, then no paleontological research will be possible.

Despite the relatively rich Pleistocene fossil record of California, the timing of the transition from the Irvingtonian to the Rancholabrean North American Land Mammal Age (NALMA) is poorly documented

and hence not well understood. For example, the first appearance (stratigraphically lowest) of the bison marks the beginning of the Rancholabrean NALMA, but there are few identifiable and stratigraphically well documented specimens of bison known from California, and those that do exist are not associated with reliable age dates. Thus, the timing of the beginning of the Rancholabrean is in question, and may be older or younger than the estimate of 300,000 years BP (before present) that has traditionally been accepted by paleontologists. In addition to the timing of the Irvingtonian-Rancholabrean transition, the composition of the faunal assemblages that comprise these biochronologic intervals and the finer details of faunal composition and change within them are also not well understood and remains problematic. Traditionally, larger mammals have been designated as index fossils and have been the focus of biostratigraphic efforts since the provincial NALMA system was codified by the Wood Committee in 1941. However, more recent work, especially on the Eocene biostratigraphy and biochronology of San Diego and Ventura counties (e.g. Walsh, 1996; Whistler and Lander, 2003), has demonstrated the value of utilizing small mammals because of their phylogenetic diversity, but also the potential to obtain statistically larger samples of specimens via screenwashing of bulk matrix samples.

The project has the potential to produce additional significant paleontological resources should construction impacts encounter early Holocene to Pleistocene-aged sediments beneath the younger or disturbed surficial sediments in this area. Significant paleontological resources are fossils and fossiliferous deposits, here defined as consisting of identifiable vertebrate fossils, large or small, uncommon invertebrate, plant, and trace fossils, and other data that provide taphonomic, taxonomic, phylogenetic, paleoecologic, stratigraphic, and/or biochronologic information.

The recovery of fossils from project excavations as the result of paleontological monitoring, together with the implementation of the procedures outlined in this report, would add to existing paleontological data and help better document the Pleistocene history of California. The recovered fossils would provide information that may be useful in more accurately and precisely determining the ages of the sedimentary units in which they were preserved depending upon the biostratigraphic utility of the fossil specimens and potential for radiocarbon dating, and provide a new Pleistocene age fossil locality data point for this portion of southern California. Depending upon the types of fossils that are recovered from project excavations and the quality of their preservation, the existing Pleistocene fossil record of California may be enhanced by the addition of new specimens of known taxa, the discovery of taxa that have not been previously reported from the general area, and possibly the discovery of previously unknown taxa. In combination, the fossil assemblage from the Project area would have the potential to add new paleoecologic and paleoenvironmental information to our existing knowledge of the Pleistocene in Orange County.

All scientifically significant fossils salvaged from the Project area will be permanently curated in an accredited regional museum where they will be available for future scientific research. The County of Orange requires consultation before the final determination of a paleontological repository is made.

10.0 IMPACTS TO PALEONTOLOGICAL RESOURCES

Surface disturbing actions in areas known to contain scientifically significant fossils (sedimentary geologic formations) may produce adverse impacts to nonrenewable paleontological resources (State CEQA Guidelines, 14 CCR Sections 15064.5[3] and 15023; State CEQA Guidelines Appendix G, Section V, Part C).

Direct impacts to paleontological resources concern the physical destruction of fossils, usually by human-caused ground disturbance. Indirect impacts to paleontological resources typically concern the loss of resources to theft and vandalism resulting from increased public access to paleontologically sensitive areas. Cumulative impacts to paleontological resources concern the incremental loss of these nonrenewable resources to society as a whole.

Project activities not related to earthmoving are not expected to have a paleontological impact, because the surface of the Project area has been surveyed and determined to be barren of fossils.

During the field survey, no fossils were observed in the surface exposures of Recent silty alluvium within the Project area boundaries. A paleontological records search for the property was performed by Dr. Samuel McLeod, at the LACM. There are no documented paleontological localities within the boundaries of, nor within one mile radius of the Project area (McLeod, 2013; Appendix A). Geologic units mapped at the surface beneath the Golden West College campus have a low paleontological sensitivity with respect to their potential to yield fossil remains (Appendix B).

The Recent deposits within the Project area are unlikely to yield fossils, and are considered to have a low potential to contain significant nonrenewable fossil resources (McLeod, 2013; Appendix A). However, older Pleistocene age deposits underlie the younger Holocene age deposits within the Golden West College campus, and have a high paleontological sensitivity (McLeod, 2013; Appendix A).

It is anticipated that construction activities that extend less than five feet below the ground surface would only impact artificial fill, topsoil, and/or the surface mapped younger Holocene age deposits mapped within the Project area. Although this is an arbitrary metric, five feet is the typical interval utilized in construction operations (e.g., mass grading, trenching, and drilling). However, it is possible that older, Pleistocene age deposits may occur at depths below five feet within the Project area, as evidenced by nearby LACM fossil collection localities (McLeod, 2013).

11.0 MITIGATION MEASURES

The Project area is comprised of young Quaternary alluvial deposits, potentially overlying older Pleistocene age deposits at depth (Morton and Miller, 2006; Saucedo et al., 2009). The paleontological sensitivity of the Pleistocene age old alluvial deposits is high and the discovery of at least some "unique paleontological resources" (CEQA Guidelines) during construction excavation is likely (Association of Environmental Professionals, 2005).

A paleontological mitigation program to mitigate adverse impacts to significant paleontologic resources is recommended for the property (McLeod, 2013) (Appendix A). Excavations into undisturbed Pleistocene age deposits, may be encountered at an indeterminate depth below the Recent alluvium during construction. If these sedimentary deposits are disturbed during construction, a paleontological monitor should be utilized in order to mitigate impacts to unique paleontological resources (McLeod, 2013; Appendix A).

If any subsurface fossils are found by construction personnel, activity in the immediate area should be suspended and the fossils should be left in place untouched. A qualified paleontologist should then evaluate the significance of the discovery and make further recommendations. Fossils that are considered unique under CEQA guidelines, Section V(c) of Appendix G (CEQA; PRC §21000, et seq.) should be collected, prepared, analyzed, reported, and curated.

According to the Society of Vertebrate Paleontology (2010):

> *"A Significant Fossiliferous Deposit is a rock unit or formation which contains significant nonrenewable paleontologic resources, here defined as comprising one or more identifiable vertebrate fossils, large or small, and any associated invertebrate and plant fossils, traces and other data that provide taphonomic, taxonomic, phylogenetic, ecologic, and stratigraphic information."*

In the unlikely event that earth-moving activities extend into a significant fossiliferous deposit, paleontological monitoring (e.g. field observation by a qualified paleontological technician) will be

warranted. If development does impact these sediments, examination of the sediments by the project paleontologist would be needed to ascertain paleontological sensitivity.

The following procedures and staffing requirements shall be implemented to ensure compliance with these requirements.

11.1 Procedures

APM-1 Retention of a qualified paleontologist

Procedures: Paleo Solutions has been retained to design and implement this document. An Orange County Qualified Paleontologist must be retained by the project owner to implement the mitigation measures discussed below.

APM-2 Preconstruction meeting

Procedures: The Principal Investigator shall participate in a preconstruction meeting with development staff and construction operations for this project to ensure an understanding of any mitigation measures required during construction, and to establish proper communication procedures.

APM-3 Paleontological monitoring in areas of high geologic sensitivity

Procedures: Paleontological resource monitoring of construction excavations involves field inspections of freshly graded surfaces, spoils piles, and all visible temporary surfaces in accordance with project safety requirements for occurrences of exposed fossil remains. During construction excavation activities, the monitoring schedule and specific locations that can be inspected are dictated by field conditions including the number and locations of heavy equipment in the cut and amount of excavation activity. The primary responsibility of paleontological monitors should always be to adhere to all project safety requirements, and to only inspect and evaluate fossil discoveries when conditions are safe to do so.

Paleontological monitoring of earthmoving activities below five feet in depth will be conducted on an as-needed basis by the paleontological monitors under the supervision of the Principal Investigator during all earthmoving activities that may expose sensitive strata. Earthmoving activities in areas of the Project area where previously undisturbed strata will be buried but not otherwise disturbed will not be monitored. The Principal Investigator or his/her assignee will have the authority to reduce monitoring once he/she determines the probability of encountering fossils has dropped below an acceptable level. If the excavations in undisturbed sediments will exceed five feet in depth, a qualified paleontological monitor should be present to observe earthmoving activities in these areas. Five feet is the general dividing point in this area after which monitoring should be initiated in sediments of high sensitivity, as determined by mapping, and in compliance with County of Orange guidelines. In areas of disturbed sediments on campus, a paleontological monitor should spot-check the construction activities until such a time that it becomes possible to determine the depth of undisturbed native sediments or that no undisturbed sediments have been or will be impacted. Monitoring of low sensitivity units such as younger, Holocene age alluvium is not recommended. Monitoring during any brushing or vegetation removal activities in the borrow pit area is not recommended, however, should impacts to this area reach a depth greater than five feet, monitoring should be implemented (Figure 10).

APM-4 Paleontological discoveries

If a fossil is discovered by a monitor during construction, the monitor must immediately notify the equipment operator and the Construction Manager to stop work, and then mark the area surrounding the discovery with flagging until it can be fully explored and evaluated. The paleontological monitor shall

immediately notify the Construction Manager and the Principal Investigator. Construction activities in the immediate vicinity of the Project area shall be immediately redirected away from the vicinity discovery to allow room for recovery of the resources as necessary. Earthmoving will be allowed to proceed through the site when the Principal Investigator determines the fossil discovery has been adequately documented and recovered.

APM-5 Post construction

All scientifically significant fossils collected during monitoring and salvage should be cleaned, repaired, sorted, and cataloged as part of the mitigation program. Prepared fossils, along with copies of all pertinent field notes, photos, and maps, should be reposited (as a donation) at the Dr. John D. Cooper Archaeological and Paleontological Center at California State University, Fullerton. Donation of the fossils should be accompanied by financial support for initial specimen storage. A final summary report should be completed that outlines the results of the mitigation program. This report should include discussions of the methods used, stratigraphic section(s) exposed, fossils collected, and significance of recovered fossils.

12.0 REFERENCES

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Appendix A: Natural History Museum of Los Angeles County Paleontological Records Search

Natural History Museum
of Los Angeles County
900 Exposition Boulevard
Los Angeles, CA 90007
tel 213.763.DINO
www.nhm.org

Vertebrate Paleontology Section
Telephone: (213) 763-3325
Fax: (213) 746-7431
e-mail: smcleod@nhm.org

17 October 2013

Paleo Solutions, Inc.
911 South Primrose Avenue, Unit J
Monrovia, CA 91016

Attn: Geraldine Aron, President

re: Paleontological resources for the proposed Golden West College Project, near Westminster, Orange County, project area

Dear Geraldine:

I have conducted a thorough search of our paleontology collection records for the locality and specimen data for the proposed Golden West College Project, near Westminster, Orange County, project area as outlined on the portion of the Seal Beach USGS topographic quadrangle map that you sent to me via e-mail on 4 September 2013. We do not have any vertebrate fossil localities that lie within the project boundaries, but we do have localities nearby from sedimentary deposits similar to those that occur in the proposed project area, although possibly on as subsurface deposits.

In the entire proposed project the surface deposits consist of younger Quaternary Alluvium, derived broadly as floodplain deposits from the Santa Ana River that currently flows to the south and other drainages from the Coyote Hills to the north. These deposits typically do not contain significant vertebrate fossils, at least in the uppermost layers, but they are usually underlain by older Quaternary deposits that frequently do contain significant vertebrate fossils. Southwest of the proposed project area, in the bluffs above the East Garden Wintersberg Channel, there are marine older Quaternary terrace deposits.

Our closest fossil vertebrate locality from these deposits is LACM 4018, situated due south of the proposed project area at the intersection of Warner Avenue and Golden West Street,

Inspiring wonder, discovery and responsibility for our natural and cultural worlds.

that produced specimens of invertebrates, reptiles, birds, rodents, horses and deer in peat between four and eight feet below the surface, but these specimens were later determined to be of very late Holocene age. Further west along Warner Avenue, close to Bolsa Chica Street, our fossil vertebrate locality LACM 65113 from these deposits produced Pleistocene age specimens of mammoth, *Mammuthus*, between six and eight feet below the soil and specimens of fossil bison, *Bison*, between fourteen and twenty feet below the soil. A little further south-southeast of the proposed project area, along Ellis Avenue east of Beach Boulevard, our vertebrate fossil localities LACM 7657-7659 from the underlying Pleistocene San Pedro Sand produced fossil shark and fish specimens including soupfin shark, *Galeorhinus galeus*, skate, *Raja*, ray, *Myliobatis*, angel shark, *Squatina californica*, cusk eel, *Otophidium*, toadfish, *Porichthys notatus*, queenfish, *Seriphus politus*, sculpin, *Leptocottus*, goby, *Lepidogobius lepidus*, and sanddabs, *Citharichthys sordidus* and *Citharichthys stigmaeus*, from well cores over 100 feet below the surface.

Further south of the proposed project area, in Huntington Beach south of Atlanta Avenue and west of Beach Boulevard, our fossil vertebrate localities LACM 7366 and 7679 produced specimens of marine, freshwater, and especially terrestrial specimens including leopard shark, *Triakis*, threespine stickleback, *Gasterosteus aculeatus*, toad, *Bufo boreas*, treefrog, *Hyla regilla*, arboreal salamander, *Aneides lugubris*, slender salamander, *Batrachoseps*, lungless salamander, *Ensatina*, pond turtle, *Clemmys marmorata*, ringneck snake, *Diadophis punctatus*, kingsnake, *Lampropeltis getulus*, whipsnake, *Masticophis*, gopher snake, *Pituophis melanoleucus*, long-nosed snake, *Rhinocheilus lecontei*, garter snake, *Thamnophis*, alligator lizards, *Gerrhonotus multicarinatus* and *Anniella pulchra*, spiny lizard, *Sceloporus*, side-blotched lizard, *Uta stansburiana*, skink, *Plestiodon*, quail, *Callipepla squamata*, rail, *Rallus limicola*, bat, Chiroptera, shrews, *Sorex ornatus* and *Notiosorex*, mole, *Scapanus latimanus*, cottontail rabbit, *Sylvilagus bachmani*, meadow vole, *Microtus californicus*, wood rat, *Neotoma*, deer mouse, *Peromyscus maniculatus*, harvest mouse, *Reithrodontomys megalotis*, pocket gopher, *Thomomys*, kangaroo rat, *Dipodomys agilis*, and squirrel, *Eutamias*. The specimens from these sites were obtained by screen-washing matrix and thus they consist solely of small specimens. Just north-northwest of localities LACM 7366 and 7679 we have a series of vertebrate fossil localities, LACM 7422-7425, that produced larger fossil specimens of mammoth, *Mammuthus*, bison, *Bison*, and horse, *Equus*, from these deposits.

Surface grading or very shallow excavations in the younger Quaternary Alluvium exposed throughout the proposed project area probably will not uncover significant vertebrate fossil remains. Deeper excavations in that extend down into the older Quaternary deposits, however, may well encounter significant fossil vertebrate specimens. Any substantial excavations in the proposed project area, therefore, should be monitored closely to quickly and professionally recover any fossil remains discovered while not impeding development. Additionally, because some of the nearby vertebrate fossil localities produced only small vertebrate remains that cannot be seen during normal paleontological monitoring, it is recommended that sediment samples be collected and processed to determine the potential for small fossils in these deposits. Any fossils recovered during mitigation should be deposited in an accredited and permanent scientific institution for the benefit of current and future generations.

This records search covers only the vertebrate paleontology records of the Natural History Museum of Los Angeles County. It is not intended to be a thorough paleontological survey of the proposed project area covering other institutional records, a literature survey, or any potential on-site survey.

Sincerely,

Samuel A. McLeod, Ph.D.
Vertebrate Paleontology

enclosure: invoice

Appendix B: Statement of Qualifications

PROJECT MANAGER / PRINCIPAL INVESTIGATOR (PALEONTOLOGY)
Sarah A. Siren, M.S.

Education: M.S., Vertebrate Paleontology, South Dakota School of Mines & Technology
B.S., Geology, The George Washington University

Ms. Siren has been a paleontological resources consultant for over a decade. She has served as paleontologist for numerous projects throughout California, with extensive experience in Imperial, Orange, Riverside, Los Angeles, San Bernardino, and San Diego counties. These projects involved multiple agencies, public and private sector clients, a variety of resources, and multidisciplinary staff supervision. She specializes in CEQA and BLM compliance standards. She has taught at Saddleback Community College in Mission Viejo, California as an associate geology professor and has worked as a curatorial assistant with the Natural History Museum of Los Angeles County, and more recently, as field manager with the San Diego Natural History Museum. Ms. Siren received a Bachelor of Science Degree in Geology (1999) from The George Washington University and was awarded a Master's Degree in Paleontology (2002) from the South Dakota School of Mines and Technology. While pursuing her degrees, she conducted studies at both the Smithsonian Institution and Badlands National Park, and supervised as lead research scientist for various field activities, curation projects, and laboratory preparations. Her diverse experience includes recovering, identifying, mapping, and preparing fossils. As a consultant, Ms. Siren is able to effectively manage projects and complete deliverables from assessments to final technical reports in a timely manner. She is a Geologist-in-Training (no.167) with the State of California and is 40 hour HAZWOPER certified.

PRESIDENT
Geraldine L. Aron

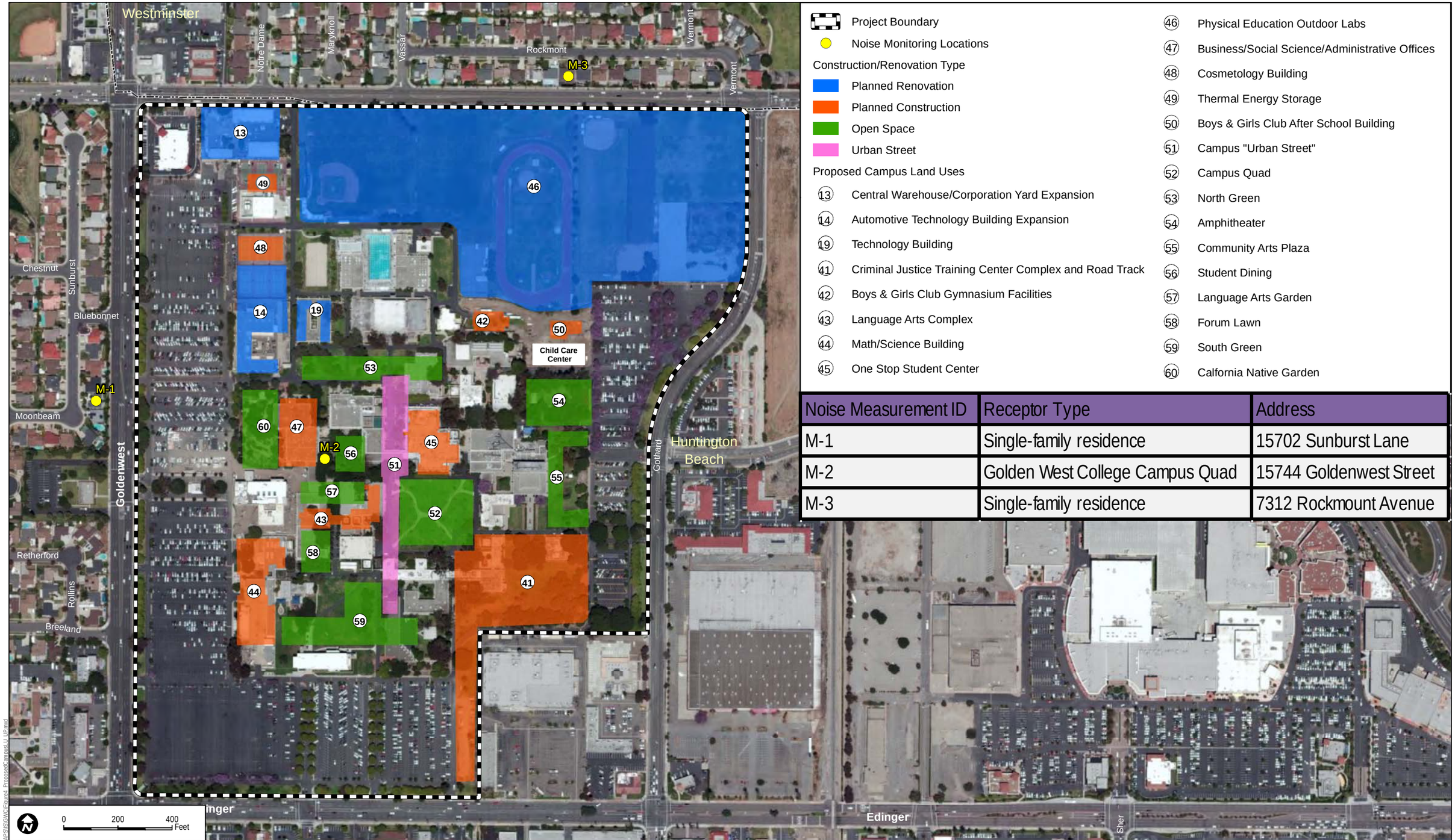
Education: M.S., Geological Sciences, California State University, Long Beach
B.S., Geological Sciences, California State University, Long Beach

Ms. Aron has fifteen years of professional experience working in the Paleontological and Cultural Resource Management field and is responsible for maintaining the overall scientific integrity and oversight of all Paleo Solutions, Inc. projects. This includes all aspects of company management, field paleontology and geology including: survey, salvage, measuring and drafting stratigraphic sections, geological mapping, sample collection, and paleontological and archaeological monitoring, budget oversight, managing, training, and coordinating the tasks of field staff, developing cliental relationships, fossil preparation, and the production of technical reports. Ms. Aron has produced hundreds of technical reports, which include paleontological assessments, DEIR's, EIR/EIS', Paleontological Mitigation and Monitoring Plans, document reviews, and survey reports for CEQA/NEPA compliance. Geraldine has worked on at least half

a dozen-water projects in and around the greater Los Angeles area and more than a dozen transmission line projects. Her field projects, both geological and paleontological, include areas in Utah, central and eastern Nevada, southern, eastern, central, and northern California counties, including Owens Valley and surrounding areas. Her career also included an appointment as a staff paleontologist at the San Diego Natural History Museum, where she gained valuable experience both in the field and in specimen preparation. Geraldine is certified by the California Energy Commission (CEC) to conduct paleontological monitoring and teach environmental awareness programs and is the Principal Investigator on the California, Nevada, and Arizona BLM permits.

APPENDIX G

Noise Calculations



- Project Boundary
- Noise Monitoring Locations

Construction/Renovation Type

- Planned Renovation
- Planned Construction
- Open Space
- Urban Street

Proposed Campus Land Uses

13. Central Warehouse/Corporation Yard Expansion
14. Automotive Technology Building Expansion
19. Technology Building
41. Criminal Justice Training Center Complex and Road Track
42. Boys & Girls Club Gymnasium Facilities
43. Language Arts Complex
44. Math/Science Building
45. One Stop Student Center
46. Physical Education Outdoor Labs
47. Business/Social Science/Administrative Offices
48. Cosmetology Building
49. Thermal Energy Storage
50. Boys & Girls Club After School Building
51. Campus "Urban Street"
52. Campus Quad
53. North Green
54. Amphitheater
55. Community Arts Plaza
56. Student Dining
57. Language Arts Garden
58. Forum Lawn
59. South Green
60. Calfornia Native Garden

Noise Measurement ID	Receptor Type	Address
M-1	Single-family residence	15702 Sunburst Lane
M-2	Golden West College Campus Quad	15744 Goldenwest Street
M-3	Single-family residence	7312 Rockmount Avenue

SOURCE: ESRI 2013, Coast Community College Vision Plan 2012

FIGURE 4.9-1

Noise Measurement Locations

7910.0001

GOLDEN WEST COLLEGE VISION 2020 FACILITIES MASTER PLAN PROGRAM ENVIRONMENTAL IMPACT REPORT

Z:\Projects\7910\01\MAPDOC\MAPSIS\GWCFigure4_ProposedCampusLU_UP.mxd

FIELD NOISE MEASUREMENT DATA

DUDEK

PROJECT	OCCD Vision 2020 Facilities Master Plan IS	**PROJECT #**	7910.0001
SITE ID	Golden West #1		
SITE ADDRESS	15702 Sunburst Lane HB, CA 92647	**OBSERVER(S)**	Caitlin Munson
			Mike Green
START DATE	10-15-13	**END DATE**	10-15-13
START TIME	10:22	**END TIME**	10:37

METEOROLOGICAL CONDITIONS

TEMP 81.5 F **HUMIDITY** 39.5 % R.H. **WIND** (CALM) LIGHT MODERATE

WINDSPD 0 MPH **DIR.** N NE S SE S SW W NW VARIABLE STEADY GUSTY

SKY (SUNNY) (CLEAR) OVRCAST PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT Rion NL-32 **TYPE** (1) 2 **SERIAL #** 01030561

CALIBRATOR Rion NC-74 **SERIAL #** 35128809

CALIBRATION CHECK **PRE-TEST** 94.1 dBA SPL **POST-TEST** 94.1 dBA SPL **WINDSCRN** ✓

SETTINGS (A-WTD) (SLOW) FAST FRONTAL RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
1			61.1	73.3	43.6	50.0	59.5	64.1	

COMMENTS

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:

ROADWAY TYPE: Goldenwest Street DIST. TO RDWY C/L OR EOP:

TRAFFIC COUNT DURATION: ___ MIN SPEED ___ MIN SPEED

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB		COUNT 2 (OR RDWY 2)	NB/EB	SB/WB	NB/EB	SB/WB
AUTOS	222	215			IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE ___					
MED TRKS	7	12								
HVY TRKS	7	7								
BUSES	2	1								
MOTRCLS	1									

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE

POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): (DIST. AIRCRAFT) RUSTLING LEAVES DIST. BARKING DOGS (BIRDS) DIST. INDUSTRIAL

DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE

OTHER: Traffic from Goldenwest Street

DESCRIPTION / SKETCH

TERRAIN HARD SOFT (MIXED) FLAT OTHER:

PHOTOS 18 bricks Approx 10-ft Wall

OTHER COMMENTS / SKETCH



DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT: OCCD Vision 2020 Facilities Master Plan IS — PROJECT #: 7910.0001
SITE ID: CAMPUS QUAD, GOLDEN WEST COLLEGE
SITE ADDRESS: 7201 Edinger Avenue, HB CA 92647 — OBSERVER(S): CM, MG
START DATE: 10-15-13 — END DATE: 10-15-13
START TIME: 10:55 am — END TIME: 11:10 am

METEOROLOGICAL CONDITIONS

TEMP: 80 F — HUMIDITY: 33 % R.H. — WIND: (CALM) LIGHT MODERATE
WINDSPD: 1-2 MPH — DIR. N NE S SE S SW W NW — (VARIABLE) STEADY GUSTY
SKY: (SUNNY) (CLEAR) OVRCAST PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: RION NC-33 — TYPE (1) 2 — SERIAL # 01030661
CALIBRATOR: RION NC-74 — SERIAL # 35125809
CALIBRATION CHECK — PRE-TEST: 94.1 dBA SPL — POST-TEST: _____ dBA SPL — WINDSCRN: ✓

SETTINGS: (A-WTD) (SLOW) FAST FRONTAL (RANDOM) ~~ANSI~~ OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
1	10:55	11:10	53.9	66.2	50.1	51.7	53.3	55.2	

COMMENTS

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: TRAFFIC AIRCRAFT RAIL INDUSTRIAL (OTHER: STUDENT TRAFFIC)
ROADWAY TYPE: — DIST. TO RDWY C/L OR EOP:

TRAFFIC COUNT DURATION: ___ MIN

COUNT 1 (OR RDWY 1)	DIRECTION	NB/EB	SB/WB	SPEED NB/EB	SPEED SB/WB
	AUTOS				
	MED TRKS				
	HVY TRKS				
	BUSES				
	MOTRCLS				

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE ___

COUNT 2 (OR RDWY 2)	___ MIN		SPEED	
	NB/EB	SB/WB	NB/EB	SB/WB

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): (DIST. AIRCRAFT) (RUSTLING LEAVES) DIST. BARKING DOGS BIRDS DIST. INDUSTRIAL
DIST. KIDS PLAYING (DIST. CONVRSTNS / YELLING) (DIST. TRAFFIC (LIST RDWYS BELOW)) DISTD GARDENERS/LANDSCAPING NOISE
OTHER: Golden West Street, Distant Train

DESCRIPTION / SKETCH

TERRAIN: HARD SOFT (MIXED) FLAT OTHER:
PHOTOS:
OTHER COMMENTS / SKETCH



DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT: OCCD Vision 2020 Facilities Master Plan IS — PROJECT #: 7910.0001
SITE ID: GWC Loc #3
SITE ADDRESS: 7201 McFadden Ave, Westminster CA — OBSERVER(S): MG & CM
START DATE: 10-15-13 — END DATE: 10-15-13
START TIME: 11:40 am — END TIME: 11:55 am

METEOROLOGICAL CONDITIONS

TEMP: 81.5 F — HUMIDITY: 46.5 % R.H. — WIND: (CALM) LIGHT MODERATE
WINDSPD: 1-2 MPH — DIR. N NE (S) SE S SW W NW — (VARIABLE) STEADY GUSTY
SKY: (SUNNY) (CLEAR) OVRCAST PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: Rion NL-32 — TYPE (1) 2 — SERIAL #: 01030551
CALIBRATOR: Rion NC-74 — SERIAL #: 35121809
CALIBRATION CHECK — PRE-TEST: 94.1 dBA SPL — POST-TEST: 94.1 dBA SPL — WINDSCRN: ✓

SETTINGS: (A-WTD) (SLOW) FAST FRONTAL (RANDOM) (ANSI) OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
1	11:40	11:55	59.2	69.3	45.7	49.4	57.3	62.6	

COMMENTS:

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: McFadden Avenue — DIST. TO RDWY C/L OR EOP:

TRAFFIC COUNT DURATION: ___ MIN — SPEED

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED
AUTOS	149	151		
MED TRKS	4	2		
HVY TRKS	1	0		
BUSES				
MOTRCLS	2	1		

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE ___

COUNT 2 (OR RDWY 2)	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED

___ MIN — SPEED

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): (DIST. AIRCRAFT) (RUSTLING LEAVES) DIST. BARKING DOGS (BIRDS) DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER:

DESCRIPTION / SKETCH

TERRAIN: HARD SOFT (MIXED) FLAT OTHER:
PHOTOS: Behind a 6ft wall
OTHER COMMENTS / SKETCH



APPENDIX H

Hazards Assessment

DUDEK
MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 760.942.5147 T 800.450.1818 F 760.632.0164

MEMORANDUM

To:	Rachel Struglia
From:	Glenna McMahon, Khristina Leyba
Subject:	Hazards Assessment for Golden West College Program EIR 15744 Goldenwest Street, Huntington Beach, CA 92647
Date:	January 10, 2014
Attachment(s):	A - EDR Radius Report, B - County of Orange Environmental Health Records, C - Hazards Interview Questionnaire, D - Aerial Photographs and Topographic Maps, E - Sanborn Fire Maps

This hazards assessment was prepared for the Golden West College Vision 2020 Facilities Master Plan Program Environmental Impact Report (EIR). This hazards assessment consists of review and summary of the following data: 1) a database search of regulatory agency records, 2) local environmental health department files for the subject property, 3) historical aerial photographs, historical topographic maps, and Sanborn Fire Insurance maps, 4) interview with the facilities manager, and 5) records on or near the subject property listed on GeoTracker (online database maintained by the Regional Water Board). The objective of the hazards assessment is to determine if there have been any impacts to the proposed project area/subject property due to current or past hazardous materials storage or use.

The subject property consists of an approximately 120-acre parcel in Huntington Beach, California (Figure 1). The subject property is currently occupied by Golden West College and consists of buildings, athletic facilities, and several parking lots (Figure 2). The subject property is bordered by McFadden Avenue to the north, Gothard Street to the east, Edinger Avenue to the south, and Goldenwest Street to the west.

REGULATORY RECORDS REVIEW

Dudek reviewed a regulatory agency records search report compiled by Environmental Data Resources (EDR) on November 11, 2013 (Attachment A). The EDR report listed fifty-five sites within the American Society for Testing and Materials (ASTM) standard search radii of the subject property.

The subject property was listed in the EDR report in the following databases: CA EMI, CA FID UST, CA HASNET, CA HIST UST, CA LUST, CA NPDE, CA SWEEPS, CA UST, NY

MANIFEST, FTTS, HIST FTTS, FINDS, ICIS, and RCRA-LQG. Two leaking underground storage tanks (LUST) were reported. A release occurred in 1988 and received case closure in July 2000. According to the *Case Closure Summary* report dated February 10, 2000, soil and groundwater remediation was performed at the site. Another release was reported in January 2010 after two USTs (2,500- gallon gasoline and 550-gallon diesel) were removed from the northwest portion of the Maintenance Yard parking lot. The case received closure in June 2012. The two releases are discussed in further detail in the Local Agency File Review section of this memo.

Twenty-seven sites identified within the within the ASTM-specified distances of the subject property are listed in databases associated with permitting and hazardous material storage or disposal. Based on the information provided in the databases for these sites, it is unlikely they have impacted the environmental conditions at the subject property.

Twenty-seven sites are listed in the Leaking Underground Storage Tank (LUST) database. Twenty-three of these are reported as having a closed status. Five of the twenty-three sites are adjacent to the subject property; however, given their closed status and location (downgradient) from the subject property it is unlikely that these sites have impacted the environmental conditions at the subject property. The remaining eighteen of the twenty-three sites are further from subject property. One site is for a release to soil only; the others involve releases to groundwater. Given the closed status and location (down or cross-gradient), they are unlikely to have impacted the environmental conditions at the subject property.

Four of the twenty-seven sites listed in the LUST database have an open case status. These sites are discussed in detail below:

1. UNICAL COP # 5888 at 15482 Goldenwest Street is located at the corner of McFadden Avenue and Goldenwest Street near the northwest corner of the subject property (Figure 3). The site is listed in the following databases: CA HIST CORTESE, CA FID UST, CA LUST, CA SWEEPS, CA UST, CA HIST UST, and EDR US Hist Auto Stat. This site was also listed under the following different names in the EDR report: John Streets Union 76, Union Oil Service Station 5888, and D & D Union 76. Gasoline and waste oil were released to the groundwater February 1997. Groundwater monitoring is preformed quarterly and a soil vapor extraction and air sparge system (AS/SVE) has operated at the site to remediate impacted soil and groundwater.

   Based on plume maps presented in the *Second quarter 2013 - Quarterly Status Report* on GeoTracker, total petroleum hydrocarbons as gasoline (TPHg) and TBA extend off site

and potentially onto the northwestern corner of the subject property. Groundwater flow direction is to the southwest and depth to groundwater water is between 2.50 to 7.50 feet below ground surface. The site's environmental consultant, ARCADIS, states groundwater concentrations are decreasing. ARCADIS also recommended that the AS/SVE system remain off during work plan implementation and Low-Threat Closure evaluation. This site is located up-gradient from the northwestern corner of the subject property and may have had impacted the environmental conditions at the subject property (Figure 2).

2. Sentry Metal Forming (FWY PRK) at 16072 Gothard Street is located 0.15 mile south southeast of the subject property. The site was also listed under the name MUTUAL METAL STAMPING & MFG INC. This site is listed in the following databases: CA SLIC, RCRA_SQG, FINDS. Based on the *Quarterly Monitoring and Sampling Report 3rd Quarter 2013*, a release of volatile organic compounds (VOCs) occurred above ground around January 1965. Groundwater flow at this site is generally south southwest. Dissolved-phase VOC concentrations exceed California Maximum Contaminant Levels (MCLs) at 4 wells at the southern portion of the site. The site's environmental consultant, Pinnacle, states that the location and extent of the contaminant plume appears to be stable and has not shown any indications that significant plume growth is occurring. Because this site is downgradient from the subject property, it is unlikely that this site has impacted the environmental conditions at the subject property.

3. Sher Lane Retail Center Dry Cleaner site at 7672-7746 Edinger Avenue is located 0.35 mile east southeast of the subject property. The site is listed in the CA SLIC database. According to GeoTracker, a leak was discovered in February 2004. The contaminants of concern at this site are tetrachloroethylene (PCE) and trichloroethylene (TCE). A SVE treatment system was installed in December 2011 and is currently operational. Because of the distance from the subject property and downgradient location, it is unlikely that this site has impacted the environmental conditions at the subject property.

4. TOSCO - 76 #5280 at 6502 Edinger Avenue is located 0.50 mile west southwest of the subject property. This site is listed in the CA NPDES, CA LUST, and CA Notify 65 database. In February 1990, soil samples were collected from beneath the three former UST (two single-wall 10,000-gallon gasoline, one single-wall 500-gallon waste oil) locations. According to the *Low Threat Case Closure Request Report,* maximum detectable TPH and benzene concentrations of 8,050 and 96.6 milligrams per kilogram (mg/kg), respectively, were detected in the soil. Given the distance from the subject

property and downgradient location, it is unlikely that this site has impacted the environmental conditions at the subject property.

The EDR report identified eight sites located in Huntington Beach, CA that were not mapped due to limited address information. Dudek further researched the location of each site. Two listings were found with one mile of the subject property. These sites are not listed in any databases that indicate a release has occurred; therefore is unlikely to have impacted environmental conditions at the subject property. The other six unmapped sites are located greater than one mile of the subject property.

LOCAL AGENCY RECORDS

County of Orange Environmental Health (EH) has records for two closed LUST cases at the subject property (Attachment B). Both of the cases were due to fuel releases from USTs formerly located near the Maintenance Yard on McFadden Avenue, east of Goldenwest Street (Figure 3).

A release was reported when two 1,000-gallon gasoline USTs were removed from the Maintenance Yard parking lot area in 1988. One UST was located in the northeast potion of the parking lot and one UST was located in the southwest portion of the parking lot. A total of ten groundwater monitoring wells were installed at the site along with a groundwater treatment system. Between 1988 and 1991, 275 gallon of free-product was removed from three wells. A groundwater treatment system operated between April 1991 and June 1995. A total of 2,400,000 gallons of water was pumped and treated, including 125 gallons of fuel hydrocarbons. A 10-day vapor extraction test was conducted in 1994 and an additional 175 gallons of petroleum hydrocarbons were reportedly removed. In 1995, approximately 2,060 cubic yards of impacted soil was excavated from the former UST area. The excavated soil was transported off-site for thermal treatment. Groundwater monitoring conducted through July 1999 showed that the dissolved-phase plume was stable. Site closure was granted in July 2000 but the Case Closure Summary reports that some contaminated soil was left in place due to the proximity of adjacent aboveground and underground structures. Wells located in the immediate vicinity of the contaminated soil left in place did not show increasing concentrations of MTBE or benzene, further suggesting that the dissolved-phase plume is stable.

A release was reported in January 2010 after two USTs (2,500-gallon gasoline and 550-gallon diesel) were removed from the northwest portion of the Maintenance Yard parking lot. Soil sample results indicated the presence of petroleum hydrocarbons and volatile organic compounds (VOCs). Approximately 66 tons of soil was excavated from the area immediately surrounding the former USTs in April 2010. The soil was transported off-site for disposal. Five soil borings

were advanced in May 2010 to determine the vertical and lateral extent of the impacts. Low concentrations of petroleum hydrocarbons and VOCs were detected in several of the soil borings and groundwater monitoring at the site resumed. The ten monitoring wells installed during the previous investigation (1988-2000) were sampled in May 2010 and January 2011. The January 2011 groundwater sampling results showed that low concentrations of petroleum hydrocarbons and VOCs were detected in four wells. The Case Closure Summary report states that the concentrations of petroleum hydrocarbons and VOCs in groundwater were below the Regional Water Quality Control Board low risk levels and are not expected to impact sensitive receptors or adjacent properties.

According to the Golden West College Vision 2020 Facilities Master Plan Initial Study (Figure 4), the areas where a release was identified is located where planned renovation is to occur on the campus. Further investigation maybe warranted in this area.

INTERVIEW WITH MAINTENANCE AND OPERATIONS DIRECTOR

Joseph Dowling, Director of Maintenance and Operations for Golden West College, was interviewed regarding background information and current uses of the subject property (Attachment C). The college has occupied the subject property since 1965. Prior use of the subject property is unknown to Mr. Dowling. The subject property has been used for industrial activities including a gasoline station and motor repair facility. The two gasoline tanks are located on campus in the Central Plant Yard (Figure 3). The tanks are both above ground storage tanks - one 1,000-gallon gasoline and one 500-gallon diesel. Clean fill dirt has been brought onto the property for construction purposes. Stained soils have previously existed on the property. Mr. Dowling stated that an old underground gas tank leaked and soil was removed and tested.

Based on the answers provided by Mr. Dowling, the underground gas tank leak is a potential environmental impact to the subject property.

AERIAL PHOTOGRAPH REVIEW

Historical aerial photographs from EDR were reviewed (Attachment D) to determine if evidence of recognized environmental conditions was present on the subject property. Historical aerial photographs from 1938, 1947, 1953, 1963, 1972, 1977, 1990, 1994, 2005, 2009, 2010 and 2012 were reviewed.

In the 1938 and 1947 and 1953 photographs, the subject property and surrounding areas appear to be used for agriculture. Several buildings are located on the northwestern portion of the subject property.

In the 1963 photograph, the subject property is unchanged. Residential housing developments are visible to the west, northwest and northeast of the subject property.

In the 1972 photograph, the majority of the present day Golden West College structures are visible on the subject property. Additional residential development and buildings are now visible to the north, south and east of the subject property. The San Diego Freeway is present northeast of the subject property.

In the 1977 photograph, another parking lot is visible on the western portion of the subject property. The remaining subject property appears unchanged from the 1972 photograph. The surrounding area has been further developed with residences and businesses.

In the 1990 and 1994 photographs, a parking lot visible on the southwestern portion of the subject property. The remaining subject property appears unchanged from the 1977 photograph. Additional residential and business structures are visible on the surrounding area. The area immediately south of the subject property is now developed with parking lots and structures.

In the 2005 photograph, there are several additional rectangular structures in the northwest portion of the subject property. The remaining the subject property and surrounding areas appear similar to the 1994 photograph

In the 2009 photograph, construction is visible in the northwest portion of the subject property. The remaining subject property and surrounding areas appear similar to the 2005 photograph.

In the 2010 photograph, a square building surrounded by a parking lot is visible in the northwest portion of the subject property. The remaining subject property and surrounding areas appear to be unchanged.

In the 2012 photograph, the subject property and surrounding areas appear to be unchanged.

Aerial photographs indicate that the subject property was potentially used for agricultural purposes, and could therefore contain residual contaminants including pesticides and herbicides.

TOPOGRAPHIC MAP REVIEW

Historical topographic maps from EDR (Attachment D) were reviewed determine if evidence of recognized environmental conditions was present on the subject property. The historical topographic maps from 1901, 1902, 1934, 1935, 1942, 1950, 1951, 1965, 1972, and 1981 were reviewed.

In the 1901 and 1902 topographic maps, no development is shown on the subject property. The subject property is bordered by Bolsa Avenue to the north, Smeltzer Avenue to the south and unnamed roads to the east and west. The Smeltzer Branch of the Southern Pacific Railroad is visible to the east of the subject property.

In the 1934 map, a building is depicted in the northwestern portion of the subject property. A few buildings are depicted in the vicinity of the subject property.

In the 1935 and 1942 maps, the subject property and surrounding area appear unchanged from the 1934 photograph.

In the 1950 and 1951 maps, the building in the northwest portion of the subject property is no longer present. The surrounding areas appear unchanged.

In the 1965 map, the subject property appears unchanged. Developments are visible on the adjacent properties to the east of the subject property. San Diego Freeway is visible to the northeast.

In the 1972 map, most of the present day Golden West College buildings are now visible on the subject property. Additional development is depicted on the adjacent properties to the north and south of the subject property.

In the 1981 map, the subject property appears unchanged from the 1972 map. Additional structures are present in surrounding areas.

SANBORN MAP REVIEW

Dudek reviewed historical Sanborn fire insurance maps (Attachment E). These provide information regarding historical activities, such as property use, property address, chemical storage and street configuration. The subject property was reported as an unmapped property and no information was available.

SUMMARY

This hazards assessment was conducted for the Golden West College Vision 2020 Facilities Master Plan Program EIR. This hazards assessment consisted of research and review of regulatory agency records and historical source information to determine if there have been any environmental impacts to the subject property. Previous impacts to the subject property were identified.

Fifty-four sites within the ASTM-specified distances of the subject property were identified in regulatory databases. Twenty-seven of the sites are listed in databases associated with permitting and hazardous material storage or disposal. Based on the information provided in the databases for these sites, they have not impacted the environmental conditions of the subject property. Twenty-three sites were identified in the LUST database; however, all have received case closure. Because these sites are more than 1/2 mile from the subject property, and/or downgradient of the subject property and closed sites, they are unlikely to have impacted the environmental conditions at the subject property. The remaining four are sites identified in the LUST database have an open case status. Three sites are unlikely to have impacted environmental conditions at the subject property because they are located downgradient from the subject property. The fourth site is adjacent to the subject property. Remediation is currently ongoing at the site for fuel hydrocarbon-impacted soil and groundwater and the site is being evaluated for Low-Threat Closure. This site is located upgradient of the northwestern corner of the subject property and may have had impacted the environmental conditions at the subject property.

Fuel released from USTs removed from the subject property was discovered in 1988 (Figure 3). According to the *Case Closure Summary* report dated February 10, 2000, soil and groundwater remediation was performed at the site. The case was closed in July 2000. Fuel released from USTs was discovered in January 2010 when two USTs were removed from the northwest portion of the Maintenance Yard parking lot (Figure 3). The case received closure in June 2012. According to the Golden West College Vision 2020 Facilities Master Plan Initial Study (Figure 4), the areas where the 1988 and 2010 releases were identified are located near areas of planned renovation.

Aerial photographs indicate that between 1938 and 1953 the subject property was used for agricultural purposes; therefore, residual pesticides and metals may be present in the soil.

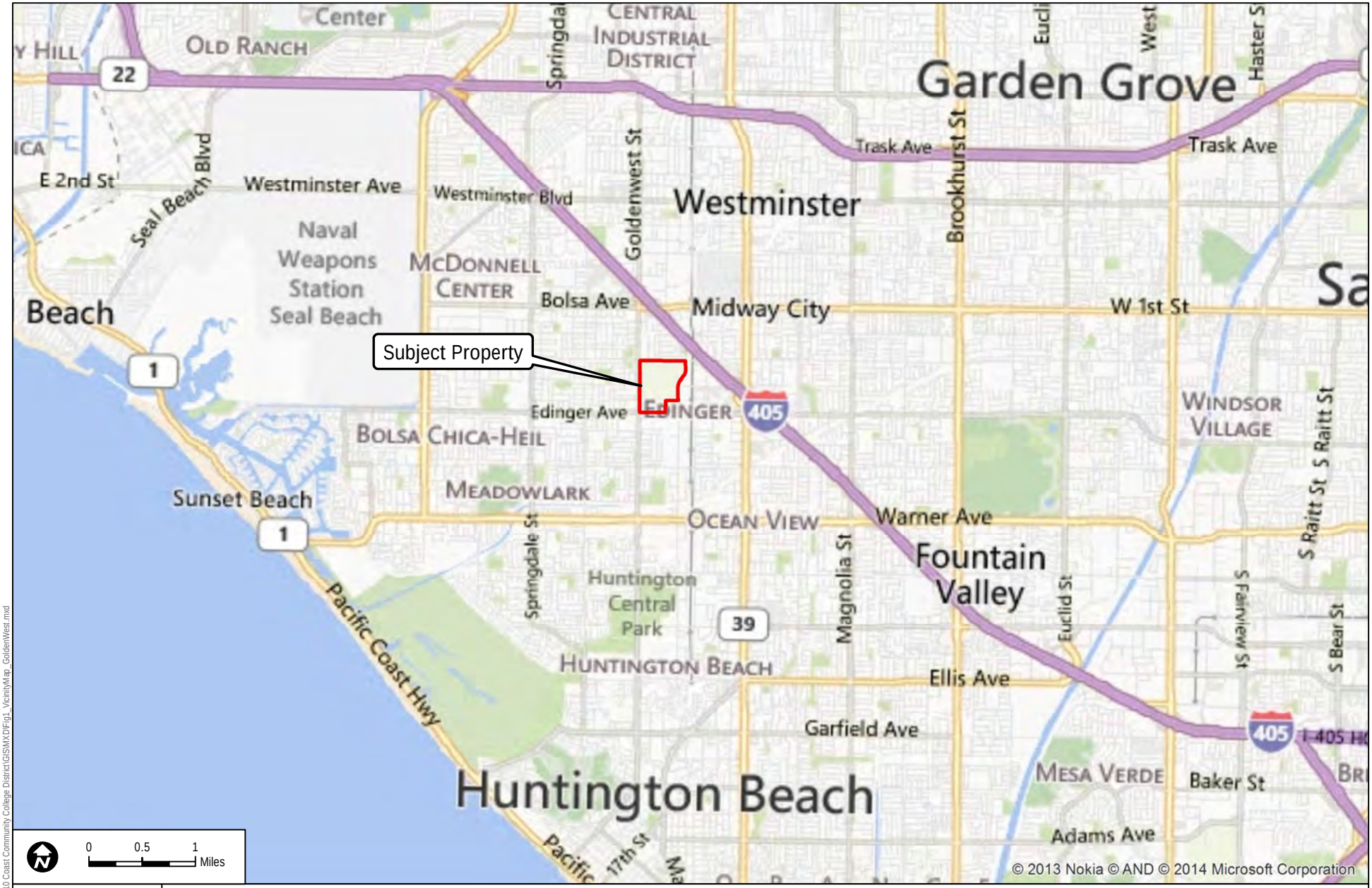
Further investigation, e.g. sampling, may be warranted in the northwestern portion of the subject property where former releases occurred (Figure 3) if the construction activities involve excavation, removal, and/or exposure of soil.

REFERENCES

Low Threat Case Closure Request Report. URS. 5 February 2013.

Case Closure Summary. County of Orange Environmental Health. 10 February 2000.

Second quarter 2013 – Quarterly Status Report. ARCADIS. 12 August 2013.



DUDEK

SOURCE: Bing Maps

FIGURE 1

Vicinity Map

7910.0001-3

JANUARY 2014

Hazards Assessment - Golden West Community College 15744 Goldenwest St. Huntington Beach, CA 92647

Path: P:\400 Hydrogeology\7910 Coast Community College District\GIS\MXD\Fig1_VicinityMap_GoldenWest.mxd



Path: P:\400.Hydrogeology\7910 Coast Community College District\GIS\MXD\Fig2_SiteMap_GoldenWest.mxd

DUDEK

7910.0001-3
JANUARY 2014

SOURCE: Bing Maps

FIGURE 2
Site Map

Hazards Assessment - Golden West Community College 15744 Goldenwest Street Huntington Beach, CA 92647



DUDEK

SOURCE: Bing Maps

FIGURE 3

Approximate location of on site Underground Storage Tanks (USTs)

7910.0001-3

JANUARY 2014

Hazards Assessment - Golden West Community College 15744 Goldenwest St. Huntington Beach, CA 92647

Path: P:\400 Hydrogeology\7910 Coast Community College District\GIS\MXD\Fig3_GoldenWest_UST_locs.mxd



SOURCE: ESRI 2013, Coast Community College Vision Plan 2012

FIGURE 4

Proposed Campus Land Uses

DUDEK

7910.0001-3

HAZARDS ASSESSMENT - GOLDEN WEST COLLEGE 15744 GOLDENWEST STREET HUNTINGTON BEACH, CA 92647

Z:\Projects\7910001\MAPDOC\MAPS\SGW\Figure4_ProposedCampusLU.mxd

ATTACHMENT A

EDR Radius Report

Golden West College
15744 Goldenwest St
Huntington Beach, CA 92647

Inquiry Number: 3772583.2s
October 30, 2013

The EDR Radius Map™ Report with GeoCheck®

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
Toll Free: 800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION	PAGE
Executive Summary	ES1
Overview Map	2
Detail Map	3
Map Findings Summary	4
Map Findings	8
Orphan Summary	225
Government Records Searched/Data Currency Tracking	GR-1

GEOCHECK ADDENDUM

Physical Setting Source Addendum	A-1
Physical Setting Source Summary	A-2
Physical Setting SSURGO Soil Map	A-6
Physical Setting Source Map	A-9
Physical Setting Source Map Findings	A-11
Physical Setting Source Records Searched	A-23

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

15744 GOLDENWEST ST
HUNTINGTON BEACH, CA 92647

COORDINATES

Latitude (North):	33.7339000 - 33° 44' 2.04''
Longitude (West):	118.0038000 - 118° 0' 13.68''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	407009.3
UTM Y (Meters):	3732910.8
Elevation:	23 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	33118-F1 SEAL BEACH, CA
Most Recent Revision:	1981
East Map:	33117-F8 NEWPORT BEACH (DIGITAL), CA
Most Recent Revision:	0

AERIAL PHOTOGRAPHY IN THIS REPORT

Photo Year:	2012
Source:	USDA

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
GOLDEN WEST COL, COAST COMM CO 15744 GOLDEN WEST ST HUNTINGTON BEACH, CA 92647	CA EMI	N/A
COAST COMM COLLEGE DIST-GOLDEN WE 15744 GOLDEN WEST ST HUNTINGTON BEACH, CA 92647	CA HAZNET	N/A

EXECUTIVE SUMMARY

GOLDEN WEST COLLEGE 15744 GOLDEN WEST STREET HUNTINGTON BEACH, CA 92647	RCRA-LQG FTTS HIST FTTS FINDS CA NPDES CA LUST Status: Completed - Case Closed CA FID UST NY MANIFEST CA SWEEPS UST	CAD983610759
GOLDEN WEST COLLEGE 15744 GOLDENWEST ST HUNTINGTON BEACH, CA 92647	CA LUST Status: Completed - Case Closed CA UST CA HIST UST	N/A
GOLDEN WEST COLLEGE 15744 GOLDEN WEST ST HUNTINGTON BEACH CA 92647 HUNTINGTON BEACH, CA 92647	ICIS	N/A

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Federal CERCLIS list

FEDERAL FACILITY ---------- Federal Facility Site Information listing

Federal RCRA CORRACTS facilities list

CORRACTS ---------- Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-CESQG ---------- RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

US ENG CONTROLS Engineering Controls Sites List
US INST CONTROL Sites with Institutional Controls
LUCIS Land Use Control Information System

Federal ERNS list

ERNS Emergency Response Notification System

State- and tribal - equivalent NPL

CA RESPONSE State Response Sites

State and tribal landfill and/or solid waste disposal site lists

CA SWF/LF Solid Waste Information System

State and tribal leaking storage tank lists

INDIAN LUST Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

CA AST Aboveground Petroleum Storage Tank Facilities
INDIAN UST Underground Storage Tanks on Indian Land
FEMA UST Underground Storage Tank Listing

State and tribal voluntary cleanup sites

CA VCP Voluntary Cleanup Program Properties
INDIAN VCP Voluntary Cleanup Priority Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

DEBRIS REGION 9 Torres Martinez Reservation Illegal Dump Site Locations
ODI Open Dump Inventory
CA WMUDS/SWAT Waste Management Unit Database
CA HAULERS Registered Waste Tire Haulers Listing
INDIAN ODI Report on the Status of Open Dumps on Indian Lands

Local Lists of Hazardous waste / Contaminated Sites

US CDL Clandestine Drug Labs
CA SCH School Property Evaluation Program
CA Toxic Pits Toxic Pits Cleanup Act Sites
CA CDL Clandestine Drug Labs

US HIST CDL ---- National Clandestine Laboratory Register

Local Land Records

LIENS 2 ---- CERCLA Lien Information
CA LIENS ---- Environmental Liens Listing
CA DEED ---- Deed Restriction Listing

Records of Emergency Release Reports

HMIRS ---- Hazardous Materials Information Reporting System
CA LDS ---- Land Disposal Sites Listing
CA MCS ---- Military Cleanup Sites Listing
CA SPILLS 90 ---- SPILLS 90 data from FirstSearch

Other Ascertainable Records

DOT OPS ---- Incident and Accident Data
DOD ---- Department of Defense Sites
FUDS ---- Formerly Used Defense Sites
CONSENT ---- Superfund (CERCLA) Consent Decrees
ROD ---- Records Of Decision
UMTRA ---- Uranium Mill Tailings Sites
US MINES ---- Mines Master Index File
TRIS ---- Toxic Chemical Release Inventory System
TSCA ---- Toxic Substances Control Act
SSTS ---- Section 7 Tracking Systems
PADS ---- PCB Activity Database System
MLTS ---- Material Licensing Tracking System
RADINFO ---- Radiation Information Database
RAATS ---- RCRA Administrative Action Tracking System
RMP ---- Risk Management Plans
CA BOND EXP. PLAN ---- Bond Expenditure Plan
CA UIC ---- UIC Listing
CA Cortese ---- "Cortese" Hazardous Waste & Substances Sites List
CA CUPA Listings ---- CUPA Resources List
CA WIP ---- Well Investigation Program Case List
INDIAN RESERV ---- Indian Reservations
SCRD DRYCLEANERS ---- State Coalition for Remediation of Drycleaners Listing
CA WDS ---- Waste Discharge System
CA PROC ---- Certified Processors Database
CA MWMP ---- Medical Waste Management Program Listing
CA HWT ---- Registered Hazardous Waste Transporter Database
CA Financial Assurance ---- Financial Assurance Information Listing
CA HWP ---- EnviroStor Permitted Facilities Listing
COAL ASH EPA ---- Coal Combustion Residues Surface Impoundments List
COAL ASH DOE ---- Steam-Electric Plant Operation Data
PCB TRANSFORMER ---- PCB Transformer Registration Database
US FIN ASSUR ---- Financial Assurance Information
EPA WATCH LIST ---- EPA WATCH LIST
US AIRS ---- Aerometric Information Retrieval System Facility Subsystem
PRP ---- Potentially Responsible Parties
2020 COR ACTION ---- 2020 Corrective Action Program List
LEAD SMELTERS ---- Lead Smelter Sites

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP ---- EDR Proprietary Manufactured Gas Plants

EXECUTIVE SUMMARY

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal Delisted NPL site list

Delisted NPL: The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may deleted from the NPL where no further response is appropriate.

A review of the Delisted NPL list, as provided by EDR, and dated 04/26/2013 has revealed that there is 1 Delisted NPL site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
RALPH GRAY TRUCKING CO.	***SOWELL AVE & GOLDEN WES***	***N 1/2 - 1 (0.790 mi.)***	***98***	***211***

Federal CERCLIS NFRAP site List

CERC-NFRAP: Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

A review of the CERC-NFRAP list, as provided by EDR, and dated 04/26/2013 has revealed that there is 1 CERC-NFRAP site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ANO-D-ART	***7436 LORGE CIR***	***SSE 1/8 - 1/4 (0.212 mi.)***	***O67***	***130***

Federal RCRA generators list

RCRA-LQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA)

of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

A review of the RCRA-LQG list, as provided by EDR, and dated 07/11/2013 has revealed that there is 1 RCRA-LQG site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CVS PHARMACY NO 8885	15520 GOLDENWEST ST	NW 0 - 1/8 (0.013 mi.)	E27	71

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 07/11/2013 has revealed that there are 18 RCRA-SQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HOFFMAN ENT	***7501 MCFADDEN***	***NE 0 - 1/8 (0.062 mi.)***	***F40***	***97***
VALUE ONE HOUR CLEANERS	***15254 GOLDEN WEST AVE***	***NNW 1/8 - 1/4 (0.227 mi.)***	***N71***	***135***

Lower Elevation	Address	Direction / Distance	Map ID	Page
A SPARK AUTO SVC	***7232 EDINGER***	***S 0 - 1/8 (0.009 mi.)***	***B9***	***29***
SAX QUALITY CLEANERS	***7168 EDINGER AVE***	***SSW 0 - 1/8 (0.010 mi.)***	***B11***	***31***
CHEVRON 93603	7012 EDINGER AVE.	SSW 0 - 1/8 (0.010 mi.)	C14	36
CHEVRON STATION NO 93603	***7012 EDINGER AVE.***	***SSW 0 - 1/8 (0.010 mi.)***	***C17***	***45***
CALIFORNIA BEACH CLEANERS	***15951 GOLDENWEST ST***	***SW 0 - 1/8 (0.013 mi.)***	***C26***	***70***
TEXACO SERVICE STATION	***6962 EDINGER***	***SW 0 - 1/8 (0.048 mi.)***	***C34***	***82***
MUTUAL METAL STAMPING & MFG IN	***16072 GOTHARD***	***SSE 1/8 - 1/4 (0.155 mi.)***	***J55***	***115***
COSTCO WHOLESALE NO 1110	7562 CENTER AVE	E 1/8 - 1/4 (0.170 mi.)	L58	118
OCEAN AIRE	***6834 EDINGER***	***SW 1/8 - 1/4 (0.178 mi.)***	***M61***	***120***
PRODUCTION PLATING#	***16091 GOTHARD STREET***	***SSE 1/8 - 1/4 (0.182 mi.)***	***J62***	***121***
ACRONTOS MFG	***16131 GOTHARD STREET ST***	***SSE 1/8 - 1/4 (0.207 mi.)***	***O64***	***127***
ANO-D-ART	***7436 LORGE CIR***	***SSE 1/8 - 1/4 (0.212 mi.)***	***O67***	***130***
VAN/DE PUBLISHING CO	***7301 MURDY CIRCLE***	***SSE 1/8 - 1/4 (0.231 mi.)***	***P72***	***137***
TECSTOR, INC	***7305 MURDY CIRCLE***	***SSE 1/8 - 1/4 (0.231 mi.)***	***P73***	***138***
COAST AUTOBODY & PAINT, INC	***16182 GOTHARD ST***	***SSE 1/8 - 1/4 (0.237 mi.)***	***O77***	***143***
MIKE'S PAINT & RESTORATION	***16182 GOTHARD ST, STE M***	***SSE 1/8 - 1/4 (0.237 mi.)***	***O78***	***146***

State- and tribal - equivalent CERCLIS

CA ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to,

identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the CA ENVIROSTOR list, as provided by EDR, and dated 09/05/2013 has revealed that there is 1 CA ENVIROSTOR site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
RALPH GRAY TRUCKING COMPANY	***SOWELL AVENUE AND GOLDEN***	***N 1/2 - 1 (0.784 mi.)***	***97***	***200***
Status: Certified				

State and tribal leaking storage tank lists

CA LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the State Water Resources Control Board Leaking Underground Storage Tank Information System.

A review of the CA LUST list, as provided by EDR, and dated 09/16/2013 has revealed that there are 27 CA LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
JOHN STREETS UNION 76	***15482 GOLDEN WEST***	***NNW 0 - 1/8 (0.027 mi.)***	***E28***	***73***
UNOCAL COP #5888	15482 GOLDENWEST	NNW 0 - 1/8 (0.027 mi.)	E29	76
Status: Open - Remediation				
MONTGOMERY WARDS	7777 EDINGER AVE	ESE 1/4 - 1/2 (0.348 mi.)	Q83	160
CHEVRON #9-8655	***7777 EDINGER***	***ESE 1/4 - 1/2 (0.348 mi.)***	***Q84***	***161***
Status: Open - Site Assessment				
Status: Completed - Case Closed				
J C PENNEY FACILITY NUMBER 106	***7777 EDINGER AVE UNIT E***	***ESE 1/4 - 1/2 (0.348 mi.)***	***Q85***	***171***
CHEVRON #9-8655	***7777 EDINGER AVE***	***ESE 1/4 - 1/2 (0.348 mi.)***	***Q87***	***175***
DROWN NEWS AGENCY	***15172 GOLDENWEST***	***NNE 1/4 - 1/2 (0.374 mi.)***	***R90***	***180***
Status: Completed - Case Closed				
ANDERSON NEWS CO	***15172 GOLDENWEST***	***NNE 1/4 - 1/2 (0.374 mi.)***	***R91***	***183***
Status: Completed - Case Closed				
HUNTINGTON BEACH WATER DEPARTM	***16192 SHER LN***	***SE 1/4 - 1/2 (0.477 mi.)***	***92***	***186***
Status: Completed - Case Closed				
ROBERT HARLAN JACKSON	***15001 GOLDENWEST ST***	***NNW 1/4 - 1/2 (0.496 mi.)***	***S94***	***188***
Status: Open - Eligible for Closure				
MOBIL OIL	15001 GOLDEN WEST ST	NNW 1/4 - 1/2 (0.496 mi.)	S95	194
Status: Completed - Case Closed				

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	***7232 EDINGER***	***S 0 - 1/8 (0.009 mi.)***	***B8***	***26***
CHEVRON STATION #93603	***7012 EDINGER***	***SSW 0 - 1/8 (0.010 mi.)***	***C16***	***38***
Status: Completed - Case Closed				
QUALITY GAS #552	7252 EDINGER AVE	SSE 0 - 1/8 (0.011 mi.)	D20	48
QUALITY STATION #552	***7252 EDINGER AVE***	***SSE 0 - 1/8 (0.011 mi.)***	***D21***	***49***
Status: Completed - Case Closed				
G & M OIL CO #34	***15971 GOLDEN WEST BLVD***	***SW 0 - 1/8 (0.013 mi.)***	***C22***	***58***
Status: Open - Eligible for Closure				
Status: Completed - Case Closed				

Lower Elevation	Address	Direction / Distance	Map ID	Page
SHELL #15971	15971 GOLDEN WEST ST	SW 0 - 1/8 (0.013 mi.)	C25	69
TEXACO	***6962 EDINGER***	***SW 0 - 1/8 (0.048 mi.)***	***C35***	***84***
Status: Completed - Case Closed				
TEXACO	***6962 EDINGER AVE***	***SW 0 - 1/8 (0.048 mi.)***	***C38***	***95***
GTE OF CALIFORNIA	7280 EDINGER	SSE 0 - 1/8 (0.070 mi.)	G41	99
GTE OF CALIFORNIA	***7280 EDINGER AVE***	***SSE 0 - 1/8 (0.070 mi.)***	***G42***	***100***
Status: Completed - Case Closed				
UNOCAL #5826	***7361 EDINGER AVE***	***SE 0 - 1/8 (0.120 mi.)***	***I49***	***104***
Status: Completed - Case Closed				
UNOCAL #5826	7361 EDINGER	SE 0 - 1/8 (0.120 mi.)	I50	106
BOARDWALK	***7441 EDINGER AVENUE***	***SE 1/8 - 1/4 (0.144 mi.)***	***I52***	***108***
Status: Completed - Case Closed				
PRODUCTION PLATING#	***16091 GOTHARD STREET***	***SSE 1/8 - 1/4 (0.182 mi.)***	***J62***	***121***
Status: Completed - Case Closed				
MURDY FIRE STATION	***16221 GOTHARD ST***	***SSE 1/4 - 1/2 (0.267 mi.)***	***P79***	***147***
Status: Completed - Case Closed				
FAR WEST FIR CORP	***16300 GOTHARD ST***	***SSE 1/4 - 1/2 (0.331 mi.)***	***81***	***153***
Status: Completed - Case Closed				

CA SLIC: SLIC Region comes from the California Regional Water Quality Control Board.

A review of the CA SLIC list, as provided by EDR, and dated 09/16/2013 has revealed that there are 6 CA SLIC sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
THE CLEANING FACTORY	7644 EDINGER AVENUE	ESE 1/4 - 1/2 (0.326 mi.)	Q80	153
CLEANING FACTORY THE	***7664 EDINGER AVE***	***ESE 1/4 - 1/2 (0.347 mi.)***	***Q82***	***156***
Facility Status: Completed - Case Closed				
DRY CLEANERS UNIT #86 (FORMER)	7777 EDINGER AVE, HUNTI	ESE 1/4 - 1/2 (0.348 mi.)	Q86	175
Facility Status: Completed - Case Closed				
HUNTINGTON BEACH MALL	7777 EDINGER AVENUE	ESE 1/4 - 1/2 (0.348 mi.)	Q88	179
SHER LANE RETAIL CENTER DRY CL	7672-7746 EDINGER AVENU	ESE 1/4 - 1/2 (0.358 mi.)	Q89	179
Facility Status: Open - Remediation				

Lower Elevation	Address	Direction / Distance	Map ID	Page
SENTRY METAL FORMING (FWY PRK)	16072 GOTHARD	SSE 1/8 - 1/4 (0.155 mi.)	J54	114
Facility Status: Open - Site Assessment				

State and tribal registered storage tank lists

CA UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the CA UST list, as provided by EDR, and dated 09/16/2013 has revealed that there are 10

CA UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
JOHN STREETS UNION 76	15482 GOLDENWEST ST	NNW 0 - 1/8 (0.027 mi.)	E30	80
DLG HUNTINGTON BCH MINI STGE	7531 MCFADDEN AVE	ENE 0 - 1/8 (0.108 mi.)	F43	101

Lower Elevation	Address	Direction / Distance	Map ID	Page
A SPARK AUTO SVC	***7232 EDINGER***	***S 0 - 1/8 (0.009 mi.)***	***B9***	***29***
CHEVRON STATION #93603	7012 EDINGER AVE	SSW 0 - 1/8 (0.010 mi.)	C15	38
QUALITY STATION #552	7252 EDINGER AVE # 552	SSE 0 - 1/8 (0.011 mi.)	D19	48
G & M OIL #34	15971 GOLDENWEST ST	SW 0 - 1/8 (0.013 mi.)	C23	67
TEXACO (121495)	6962 EDINGER AVE	SW 0 - 1/8 (0.048 mi.)	C36	95
UNOCAL #5826	7361 EDINGER AVE	SE 0 - 1/8 (0.120 mi.)	I46	103
LEVITZ FURNITURE CO	***7441 EDINGER AVE***	***SE 1/8 - 1/4 (0.160 mi.)***	***K56***	***116***
COSTCO GAS STATION #1110	7564 CENTER AVE	E 1/8 - 1/4 (0.173 mi.)	L59	119

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Landfill / Solid Waste Disposal Sites

CA SWRCY: A listing of recycling facilities in California.

A review of the CA SWRCY list, as provided by EDR, and dated 09/16/2013 has revealed that there is 1 CA SWRCY site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NEXCYCLE	15300 GOLDENWEST ST	NNW 1/8 - 1/4 (0.186 mi.)	N63	127

Local Lists of Hazardous waste / Contaminated Sites

CA HIST Cal-Sites: Formerly known as ASPIS, this database contains both known and potential hazardous substance sites. The source is the California Department of Toxic Substance Control. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

A review of the CA HIST Cal-Sites list, as provided by EDR, and dated 08/08/2005 has revealed that there is 1 CA HIST Cal-Sites site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
RALPH GRAY TRUCKING COMPANY	***SOWELL AVENUE AND GOLDE***	***N 1/2 - 1 (0.784 mi.)***	***97***	***200***

Local Lists of Registered Storage Tanks

CA FID UST: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there are

5 CA FID UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
JOHN STREETS UNION 76	***15482 GOLDEN WEST***	***NNW 0 - 1/8 (0.027 mi.)***	***E28***	***73***
Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
CHEVRON STATION #93603	***7012 EDINGER***	***SSW 0 - 1/8 (0.010 mi.)***	***C16***	***38***
QUALITY STATION #552	***7252 EDINGER AVE***	***SSE 0 - 1/8 (0.011 mi.)***	***D21***	***49***
G & M OIL CO #34	***15971 GOLDEN WEST BLVD***	***SW 0 - 1/8 (0.013 mi.)***	***C22***	***58***
TEXACO	***6962 EDINGER***	***SW 0 - 1/8 (0.048 mi.)***	***C35***	***84***

CA HIST UST: Historical UST Registered Database.

A review of the CA HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 11 CA HIST UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SERVICE STATION 5888	15482 GOLDENWEST ST	NNW 0 - 1/8 (0.027 mi.)	E31	80
UNION OIL SERVICE STATION 5888	15482 GOLDENWEST ST	NNW 0 - 1/8 (0.027 mi.)	E32	81
Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
ARCO	7232 EDINGER AVE	S 0 - 1/8 (0.009 mi.)	B6	25
93603	7012 EDINGER AVE	SSW 0 - 1/8 (0.010 mi.)	C18	47
SHELL OIL COMPANY	15971 GOLDENWEST ST	SW 0 - 1/8 (0.013 mi.)	C24	68
TEXACO	***6962 EDINGER AVE***	***SW 0 - 1/8 (0.048 mi.)***	***C38***	***95***
SERVICE STATION 5826	7361 EDINGER AVE	SE 0 - 1/8 (0.120 mi.)	I47	103
UNION OIL SERVICE STATION 5826	7361 EDINGER AVE	SE 0 - 1/8 (0.120 mi.)	I48	104
LEVITZ FURNITURE CO.	7441 EDINGER AVE	SE 1/8 - 1/4 (0.160 mi.)	K57	117
PRODUCTION PLATING#	***16091 GOTHARD STREET***	***SSE 1/8 - 1/4 (0.182 mi.)***	***J62***	***121***
ANO-D-ART	***7436 LORGE CIR***	***SSE 1/8 - 1/4 (0.212 mi.)***	***O67***	***130***

CA SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the CA SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there are 5 CA SWEEPS UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
JOHN STREETS UNION 76	***15482 GOLDEN WEST***	***NNW 0 - 1/8 (0.027 mi.)***	***E28***	***73***
Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
CHEVRON STATION #93603	***7012 EDINGER***	***SSW 0 - 1/8 (0.010 mi.)***	***C16***	***38***
QUALITY STATION #552	***7252 EDINGER AVE***	***SSE 0 - 1/8 (0.011 mi.)***	***D21***	***49***
G & M OIL CO #34	***15971 GOLDEN WEST BLVD***	***SW 0 - 1/8 (0.013 mi.)***	***C22***	***58***
TEXACO	***6962 EDINGER***	***SW 0 - 1/8 (0.048 mi.)***	***C35***	***84***

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 07/11/2013 has revealed that there are 2 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
HOME DEPOT USA HD 6685 EXPO	***6912 EDINGER AVE***	***SSW 1/8 - 1/4 (0.150 mi.)***	***53***	***112***
CARTERS GEAR BOX SHOP	***16182 GOTHARD UNIT J***	***SSE 1/8 - 1/4 (0.237 mi.)***	***O76***	***140***

CA HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the CA HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 17 CA HIST CORTESE sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
GOLDENWEST COLLEGE	7112	NNW 0 - 1/8 (0.010 mi.)	12	35
JOHN STREETS UNION 76	***15482 GOLDEN WEST***	***NNW 0 - 1/8 (0.027 mi.)***	***E28***	***73***
CHEVRON #9-8655	***7777 EDINGER***	***ESE 1/4 - 1/2 (0.348 mi.)***	***Q84***	***161***
CHEVRON #9-8655	***7777 EDINGER AVE***	***ESE 1/4 - 1/2 (0.348 mi.)***	***Q87***	***175***
DROWN NEWS AGENCY	***15172 GOLDENWEST***	***NNE 1/4 - 1/2 (0.374 mi.)***	***R90***	***180***
HUNTINGTON BEACH WATER DEPARTM	***16192 SHER LN***	***SE 1/4 - 1/2 (0.477 mi.)***	***92***	***186***
MOBIL #11-G3W	15001 GOLDEN	NNW 1/4 - 1/2 (0.496 mi.)	S93	188

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	***7232 EDINGER***	***S 0 - 1/8 (0.009 mi.)***	***B8***	***26***
CHEVRON STATION #93603	***7012 EDINGER***	***SSW 0 - 1/8 (0.010 mi.)***	***C16***	***38***
QUALITY STATION #552	***7252 EDINGER AVE***	***SSE 0 - 1/8 (0.011 mi.)***	***D21***	***49***
G & M OIL CO #34	***15971 GOLDEN WEST BLVD***	***SW 0 - 1/8 (0.013 mi.)***	***C22***	***58***
TEXACO	***6962 EDINGER***	***SW 0 - 1/8 (0.048 mi.)***	***C35***	***84***
GTE OF CALIFORNIA	***7280 EDINGER AVE***	***SSE 0 - 1/8 (0.070 mi.)***	***G42***	***100***
UNOCAL #5826	***7361 EDINGER AVE***	***SE 0 - 1/8 (0.120 mi.)***	***I49***	***104***
BOARDWALK	***7441 EDINGER AVENUE***	***SE 1/8 - 1/4 (0.144 mi.)***	***I52***	***108***
MURDY FIRE STATION	***16221 GOTHARD ST***	***SSE 1/4 - 1/2 (0.267 mi.)***	***P79***	***147***
FAR WEST FIR CORP	***16300 GOTHARD ST***	***SSE 1/4 - 1/2 (0.331 mi.)***	***81***	***153***

CA Notify 65: Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

A review of the CA Notify 65 list, as provided by EDR, and dated 10/21/1993 has revealed that there is 1 CA Notify 65 site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
TOSCO - 76 #5280	***6502 EDINGER AVE***	***WSW 1/2 - 1 (0.507 mi.)***	***96***	***196***

EXECUTIVE SUMMARY

CA DRYCLEANERS: A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaners' agents; linen supply; coin-operated laundries and cleaning; drycleaning plants except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

A review of the CA DRYCLEANERS list, as provided by EDR, and dated 09/10/2013 has revealed that there are 3 CA DRYCLEANERS sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
GOLDEN W CLEANERS	15382 GOLDENWEST ST	NNW 0 - 1/8 (0.110 mi.)	H44	102
VALUE ONE HOUR CLEANERS	***15254 GOLDENWEST ST***	***NNW 1/8 - 1/4 (0.227 mi.)***	***N70***	***134***

Lower Elevation	Address	Direction / Distance	Map ID	Page
SAX QUALITY CLEANERS	***7168 EDINGER AVE***	***SSW 0 - 1/8 (0.010 mi.)***	***B11***	***31***

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR US Hist Auto Stat: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there are 10 EDR US Hist Auto Stat sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	15482 GOLDENWEST ST	NNW 0 - 1/8 (0.027 mi.)	E33	82
Not reported	7501 MCFADDEN AVE	NE 0 - 1/8 (0.062 mi.)	F39	97

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	7232 EDINGER AVE	S 0 - 1/8 (0.009 mi.)	B7	26
Not reported	7012 EDINGER AVE	SSW 0 - 1/8 (0.010 mi.)	C13	36
Not reported	6962 EDINGER AVE	SW 0 - 1/8 (0.048 mi.)	C37	95
Not reported	7361 EDINGER AVE	SE 0 - 1/8 (0.120 mi.)	I51	107
Not reported	16131 GOTHARD ST	SSE 1/8 - 1/4 (0.207 mi.)	O65	129
Not reported	16041 MARJAN LN	SW 1/8 - 1/4 (0.212 mi.)	M66	130
Not reported	7451 LORGE CIR	SSE 1/8 - 1/4 (0.220 mi.)	O68	133
Not reported	16182 GOTHARD ST	SSE 1/8 - 1/4 (0.237 mi.)	O74	140

EXECUTIVE SUMMARY

EDR US Hist Cleaners: EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR US Hist Cleaners list, as provided by EDR, has revealed that there are 5 EDR US Hist Cleaners sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	15382 GOLDENWEST ST	NNW 0 - 1/8 (0.110 mi.)	H45	102
Not reported	15254 GOLDENWEST ST	NNW 1/8 - 1/4 (0.227 mi.)	N69	133

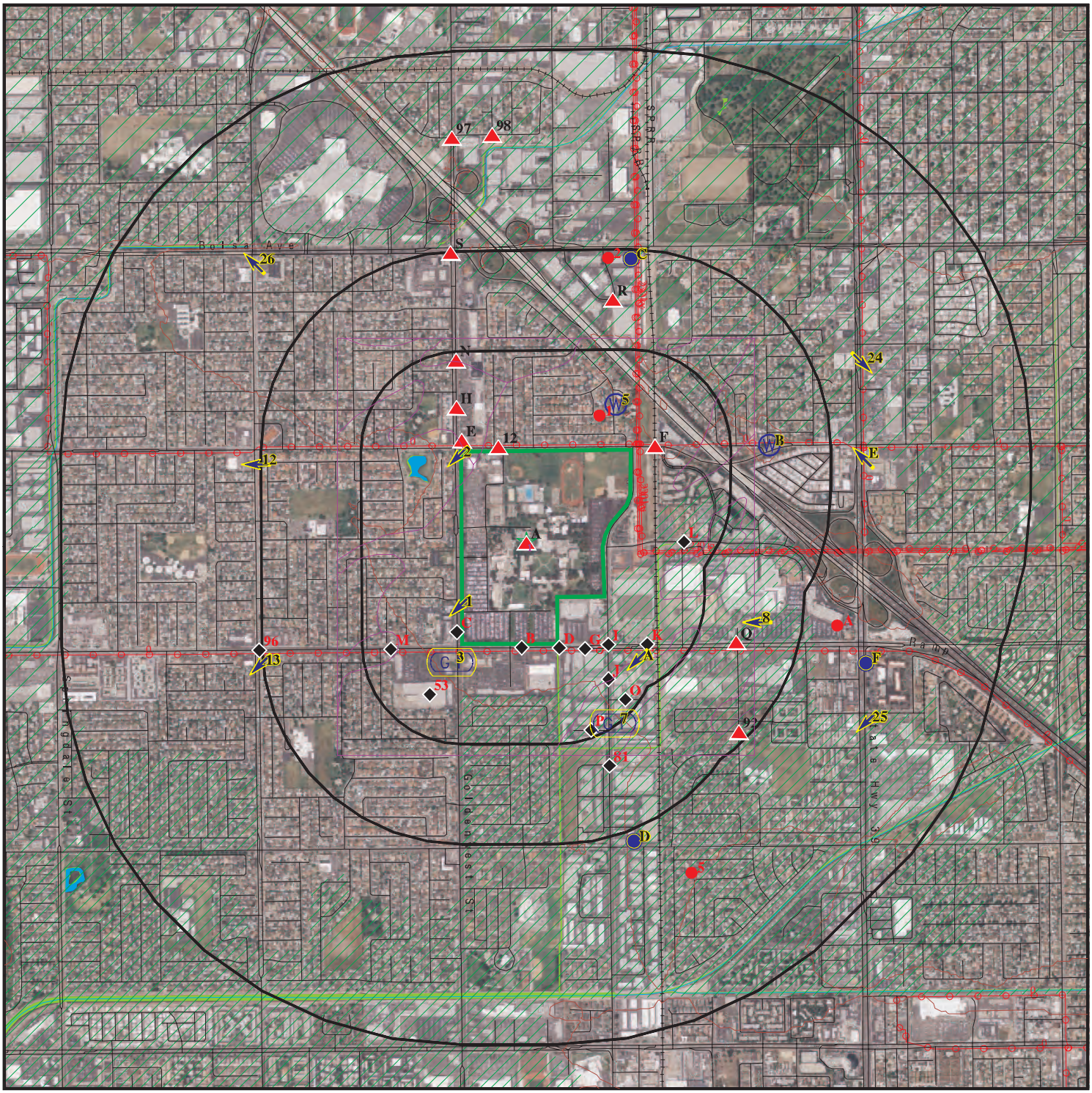
Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	7168 EDINGER AVE	SSW 0 - 1/8 (0.010 mi.)	B10	30
Not reported	6834 EDINGER AVE	SW 1/8 - 1/4 (0.178 mi.)	M60	119
Not reported	16182 GOTHARD ST	SSE 1/8 - 1/4 (0.237 mi.)	O75	140

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 9 records.

Site Name	Database(s)
KRIK WELL #80	CERCLIS, PRP
HUNTINGTON BEACH LANDFILL	CA LUST
1X CITY OF WEST MINISTER	CA HAZNET
GOLDEN WESTMINSTER SPECIALTY CTR	CA HAZNET
GOLDEN WESTMINSTER CENTER	CA HAZNET
WEST STATE CLEANERS	CA HAZNET
WEST STATE CLEANERS	CA HAZNET
CITY OF HUNTINGTON BEACH	US MINES, FINDS
GOTHARD STREET CLOSED LANDFILL	ODI

OVERVIEW MAP - 3772583.2s



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

0 1/4 1/2 1 Miles

Indian Reservations BIA

Power transmission lines

Oil & Gas pipelines from USGS

100-year flood zone

500-year flood zone

National Wetland Inventory

Areas of Concern

N

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Golden West College	CLIENT:	Dudek & Associates
ADDRESS:	15744 Goldenwest St Huntington Beach CA 92647	CONTACT:	Khristina Leyba
		INQUIRY #:	3772583.2s
LAT/LONG:	33.7339 / 118.0038	DATE:	October 30, 2013 7:38 pm

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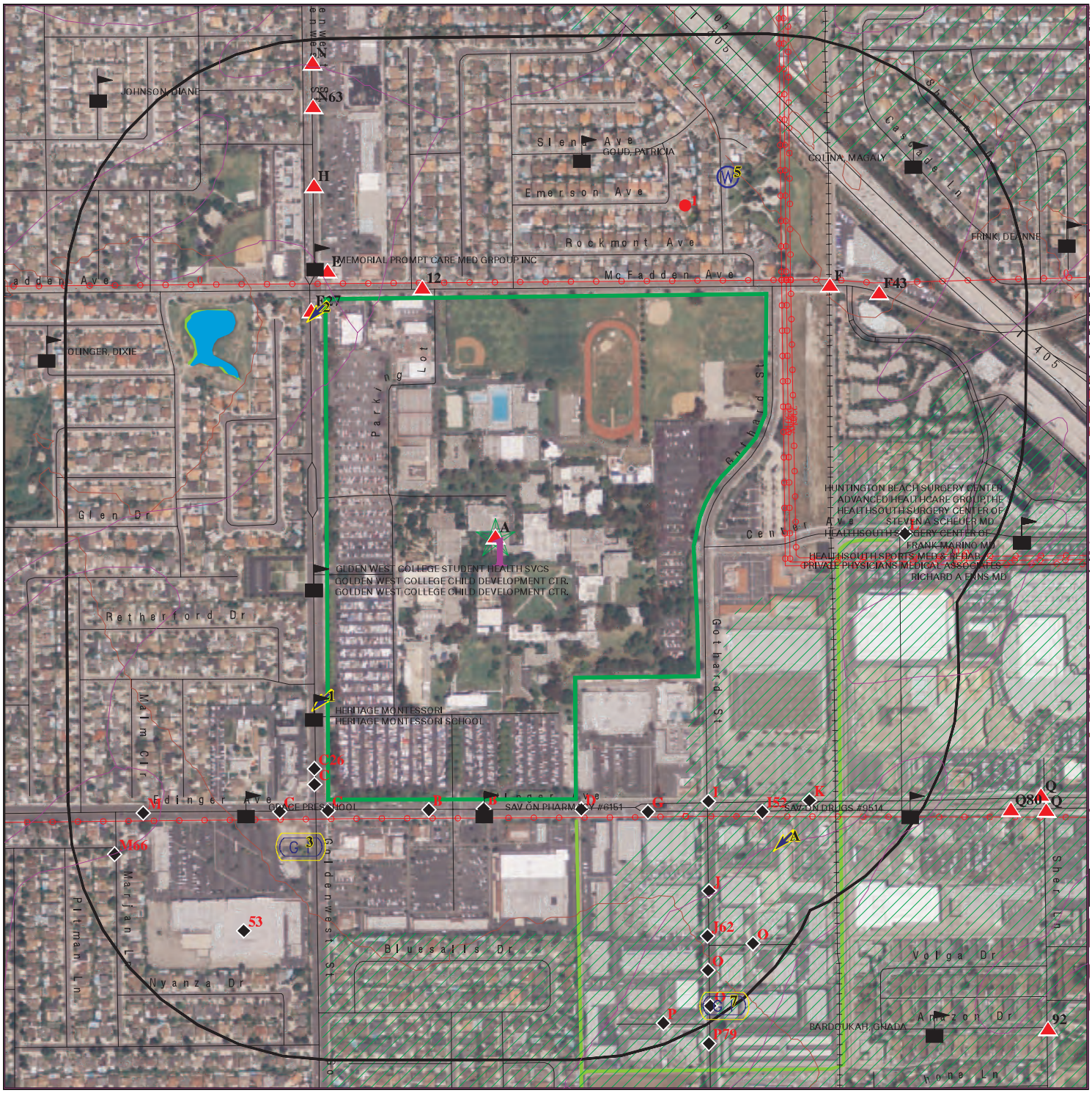
DETAIL MAP - 3772583.2s



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

0 1/8 1/4 1/2 Miles

Indian Reservations BIA

Power transmission lines

Oil & Gas pipelines from USGS

100-year flood zone

500-year flood zone

National Wetland Inventory

Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Golden West College	CLIENT:	Dudek & Associates
ADDRESS:	15744 Goldenwest St Huntington Beach CA 92647	CONTACT:	Khristina Leyba
		INQUIRY #:	3772583.2s
LAT/LONG:	33.7339 / 118.0038	DATE:	October 30, 2013 7:39 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	1	NR	1
Federal CERCLIS list								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	1	0	NR	NR	1
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250	1	1	0	NR	NR	NR	2
RCRA-SQG	0.250		7	11	NR	NR	NR	18
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
CA RESPONSE	1.000		0	0	0	0	NR	0
State- and tribal - equivalent CERCLIS								
CA ENVIROSTOR	1.000		0	0	0	1	NR	1
State and tribal landfill and/or solid waste disposal site lists								
CA SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
CA LUST	0.500	2	14	2	11	NR	NR	29

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CA SLIC	0.500		0	1	5	NR	NR	6
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
CA UST	0.250	1	8	2	NR	NR	NR	11
CA AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
CA VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
CA WMUDS/SWAT	0.500		0	0	0	NR	NR	0
CA SWRCY	0.500		0	1	0	NR	NR	1
CA HAULERS	TP		NR	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
CA HIST Cal-Sites	1.000		0	0	0	1	NR	1
CA SCH	0.250		0	0	NR	NR	NR	0
CA Toxic Pits	1.000		0	0	0	0	NR	0
CA CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
CA FID UST	0.250	1	5	0	NR	NR	NR	6
CA HIST UST	0.250	1	8	3	NR	NR	NR	12
CA SWEEPS UST	0.250	1	5	0	NR	NR	NR	6
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
CA LIENS	TP		NR	NR	NR	NR	NR	0
CA DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
CA CHMIRS	TP		NR	NR	NR	NR	NR	0
CA LDS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CA MCS	TP		NR	NR	NR	NR	NR	0
CA Orange Co. Industrial Site	TP		NR	NR	NR	NR	NR	0
CA SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	2	NR	NR	NR	2
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP	1	NR	NR	NR	NR	NR	1
HIST FTTS	TP	1	NR	NR	NR	NR	NR	1
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP	1	NR	NR	NR	NR	NR	1
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP	1	NR	NR	NR	NR	NR	1
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
CA NPDES	TP	1	NR	NR	NR	NR	NR	1
CA UIC	TP		NR	NR	NR	NR	NR	0
CA Cortese	0.500		0	0	0	NR	NR	0
CA HIST CORTESE	0.500		9	1	7	NR	NR	17
CA CUPA Listings	0.250		0	0	NR	NR	NR	0
NY MANIFEST	0.250	1	0	0	NR	NR	NR	1
CA Notify 65	1.000		0	0	0	1	NR	1
CA DRYCLEANERS	0.250		2	1	NR	NR	NR	3
CA WIP	0.250		0	0	NR	NR	NR	0
CA ENF	TP		NR	NR	NR	NR	NR	0
CA HAZNET	TP	1	NR	NR	NR	NR	NR	1
CA EMI	TP	1	NR	NR	NR	NR	NR	1
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
CA WDS	TP		NR	NR	NR	NR	NR	0
CA PROC	0.500		0	0	0	NR	NR	0
CA MWMP	0.250		0	0	NR	NR	NR	0
CA HWT	0.250		0	0	NR	NR	NR	0
CA Financial Assurance	TP		NR	NR	NR	NR	NR	0
CA HWP	1.000		0	0	0	0	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
US AIRS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		6	4	NR	NR	NR	10
EDR US Hist Cleaners	0.250		2	3	NR	NR	NR	5

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 **GOLDEN WEST COL, COAST COMM CO** **CA EMI** **S104574935**
Target **15744 GOLDEN WEST ST** **N/A**
Property **HUNTINGTON BEACH, CA 92647**

Site 1 of 5 in cluster A

Actual:
23 ft.

EMI:

Year:	1987
County Code:	30
Air Basin:	SC
Facility ID:	19353
Air District Name:	SC
SIC Code:	8221
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2
Reactive Organic Gases Tons/Yr:	2
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1990
County Code:	30
Air Basin:	SC
Facility ID:	19353
Air District Name:	SC
SIC Code:	8222
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2
Reactive Organic Gases Tons/Yr:	2
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1993
County Code:	30
Air Basin:	SC
Facility ID:	19353
Air District Name:	SC
SIC Code:	8222
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	1
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1995

GOLDEN WEST COL, COAST COMM CO (Continued) **S104574935**

County Code:	30
Air Basin:	SC
Facility ID:	19353
Air District Name:	SC
SIC Code:	8222
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	1
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

A2 **COAST COMM COLLEGE DIST-GOLDEN WEST** **CA HAZNET** **S113018051**
Target **15744 GOLDEN WEST ST** **N/A**
Property **HUNTINGTON BEACH, CA 92647**

Site 2 of 5 in cluster A

Actual:
23 ft.

HAZNET:

Year:	2012
Gepaid:	CAD983610759
Contact:	DEEPAK CHAUHAN, EHS SPECIALIST
Telephone:	7144384733
Mailing Name:	Not reported
Mailing Address:	1370 ADAMS AVE
Mailing City,St,Zip:	COSTA MESA, CA 926260000
Gen County:	Orange
TSD EPA ID:	CAT080013352
TSD County:	Los Angeles
Waste Category:	Not reported
Disposal Method:	Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons:	0.252
Facility County:	Orange

Year:	2012
Gepaid:	CAD983610759
Contact:	DEEPAK CHAUHAN, EHS SPECIALIST
Telephone:	7144384733
Mailing Name:	Not reported
Mailing Address:	1370 ADAMS AVE
Mailing City,St,Zip:	COSTA MESA, CA 926260000
Gen County:	Orange
TSD EPA ID:	CAT080013352
TSD County:	Los Angeles
Waste Category:	Not reported
Disposal Method:	Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons:	0.252
Facility County:	Orange

Year:	2012
Gepaid:	CAD983610759
Contact:	DEEPAK CHAUHAN, EHS SPECIALIST

COAST COMM COLLEGE DIST-GOLDEN WEST (Continued) **S113018051**

Telephone: 7144384733
Mailing Name: Not reported
Mailing Address: 1370 ADAMS AVE
Mailing City,St,Zip: COSTA MESA, CA 926260000
Gen County: Orange
TSD EPA ID: CAT080013352
TSD County: Los Angeles
Waste Category: Not reported
Disposal Method: Fuel Blending Prior To Energy Recovery At Another Site
Tons: 0.504
Facility County: Orange

Year: 2012
Gepaid: CAD983610759
Contact: DEEPAK CHAUHAN, EHS SPECIALIST
Telephone: 7144384733
Mailing Name: Not reported
Mailing Address: 1370 ADAMS AVE
Mailing City,St,Zip: COSTA MESA, CA 926260000
Gen County: Orange
TSD EPA ID: CAT080013352
TSD County: Los Angeles
Waste Category: Not reported
Disposal Method: Fuel Blending Prior To Energy Recovery At Another Site
Tons: 0.504
Facility County: Orange

Year: 2012
Gepaid: CAD983610759
Contact: DEEPAK CHAUHAN, EHS SPECIALIST
Telephone: 7144384733
Mailing Name: Not reported
Mailing Address: 1370 ADAMS AVE
Mailing City,St,Zip: COSTA MESA, CA 926260000
Gen County: Orange
TSD EPA ID: CAT080013352
TSD County: Los Angeles
Waste Category: Not reported
Disposal Method: Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons: 0.4587
Facility County: Orange

Click this hyperlink while viewing on your computer to access
373 additional CA_HAZNET: record(s) in the EDR Site Report.

A3 **GOLDEN WEST COLLEGE** **RCRA-LQG** **1000597079**
Target **15744 GOLDEN WEST STREET** **FTTS** **CAD983610759**
Property **HUNTINGTON BEACH, CA 92647** **HIST FTTS**
FINDS
Site 3 of 5 in cluster A **CA NPDES**
CA LUST
Actual: **CA FID UST**
23 ft. **NY MANIFEST**
CA SWEEPS UST

RCRA-LQG:
Date form received by agency: 06/03/2010

GOLDEN WEST COLLEGE (Continued) **1000597079**

Facility name:	GOLDEN WEST COLLEGE
Facility address:	15744 GOLDEN WEST STREET HUNTINGTON BEACH, CA 92647
EPA ID:	CAD983610759
Mailing address:	GOLDEN WEST STREET HUNTINGTON BEACH, CA 92647
Contact:	DEEPAK CHAUHAN
Contact address:	ADAMS AVE COSTA MESA, CA 92647
Contact country:	Not reported
Contact telephone:	(714) 438-4733
Contact email:	DCHAUHAN@MAIL.CCCD.EDU
EPA Region:	09
Classification:	Large Quantity Generator
Description:	Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:

Owner/operator name:	COAST COMMUNITY COLLEGE
Owner/operator address:	ADAMS AVE COSTA MESA, CA 92647
Owner/operator country:	Not reported
Owner/operator telephone:	(714) 438-4733
Legal status:	State
Owner/Operator Type:	Owner
Owner/Op start date:	01/01/1996
Owner/Op end date:	Not reported

Owner/operator name:	DEEPAK CHAUHAN
Owner/operator address:	Not reported Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	State
Owner/Operator Type:	Operator
Owner/Op start date:	07/01/2005
Owner/Op end date:	Not reported

Owner/operator name:	COAST COMMUNITY COLLEGE DISTRICT
Owner/operator address:	1370 ADAMS AVE COSTA MESA, CA 92626
Owner/operator country:	Not reported
Owner/operator telephone:	(714) 432-5745
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

GOLDEN WEST COLLEGE (Continued) **1000597079**

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Universal Waste Summary:
Waste type: Batteries
Accumulated waste on-site: Yes
Generated waste on-site: No

Waste type: Lamps
Accumulated waste on-site: Yes
Generated waste on-site: No

Waste type: Pesticides
Accumulated waste on-site: Yes
Generated waste on-site: No

Waste type: Thermostats
Accumulated waste on-site: Yes
Generated waste on-site: No

Historical Generators:
Date form received by agency: 12/17/1991
Facility name: GOLDEN WEST COLLEGE
Classification: Small Quantity Generator

Hazardous Waste Summary:
Waste code: 135
Waste name: 135

Waste code: 151
Waste name: 151

Waste code: 214
Waste name: 214

Waste code: 223
Waste name: 223

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS

GOLDEN WEST COLLEGE (Continued) **1000597079**

CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

FTTS:
Case Number: Not reported
Docket Number: D91-0313-02
Complaint Issue Date: 03/11/91
Abatement Amount: 0.0000
Proposed Penalty: 81000.0000
Final Assessment: 0.0000
Final Order Date: 08/07/92
Close Date: / /
Violations(s): PCB, Use
PCB, Dispose
PCB, Failure to Maintain Records

FTTS INSP:
Inspection Number: 19900808CA013 1
Region: 09
Inspection Date: 08/08/90
Inspector: DAVID PRICE
Violation occurred: Yes
Investigation Type: Section 6 PCB State Conducted
Investigation Reason: Neutral Scheme, State
Legislation Code: TSCA
Facility Function: User

HIST FTTS:
Case Number: Not reported
Docket Number: D91-0313-02

GOLDEN WEST COLLEGE (Continued) **1000597079**

Complaint Issue Date: 03/11/1991
Abatement Amount: 0.0000
Proposed Penalty: 81000.0000
Final Assessment: 0.0000
Final Order Date: 08/07/1992
Close Date: / /
Violations(s): PCB, Use
PCB, Dispose
PCB, Failure to Maintain Records

HIST FTTS INSP:
Inspection Number: 19900808CA013 1
Region: 09
Inspection Date: Not reported
Inspector: DAVID PRICE
Violation occurred: Yes
Investigation Type: Section 6 PCB State Conducted
Investigation Reason: Neutral Scheme, State
Legislation Code: TSCA
Facility Function: User

FINDS:

Registry ID: 110002864062

Environmental Interest/Information System

NCDB (National Compliance Data Base) supports implementation of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Toxic Substances Control Act (TSCA). The system tracks inspections in regions and states with cooperative agreements, enforcement actions, and settlements.

California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HAZARDOUS WASTE BIENNIAL REPORTER

ICIS (Integrated Compliance Information System) is the Integrated Compliance Information System and provides a database that, when complete, will contain integrated Enforcement and Compliance information across most of EPA's programs. The vision for ICIS is to replace EPA's independent databases that contain Enforcement data with a single repository for that information. Currently, ICIS contains all Federal Administrative and Judicial enforcement actions. This information is maintained in ICIS by EPA in the Regional offices and it Headquarters. A future release of ICIS will replace the Permit

GOLDEN WEST COLLEGE (Continued) **1000597079**

Compliance System (PCS) which supports the NPDES and will integrate that information with Federal actions already in the system. ICIS also has the capability to track other activities occurring in the Region that support Compliance and Enforcement programs. These include; Incident Tracking, Compliance Assistance, and Compliance Monitoring.

NPDES:

Npdes Number:	CAS000002
Facility Status:	Active
Agency Id:	0
Region:	8
Regulatory Measure Id:	402972
Order No:	2009-0009-DWQ
Regulatory Measure Type:	Enrollee
Place Id:	Not reported
WDID:	8 30C357909
Program Type:	Construction
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	04/19/2010
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Boys and Girls Club of Huntington Valley
Discharge Address:	16582 Brookhurst St
Discharge City:	Fountain Valley
Discharge State:	California
Discharge Zip:	92708

Npdes Number:	CAS000002
Facility Status:	Terminated
Agency Id:	0
Region:	8
Regulatory Measure Id:	349046
Order No:	2009-0009-DWQ
Regulatory Measure Type:	Enrollee
Place Id:	Not reported
WDID:	8 30C352797
Program Type:	Construction
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	07/30/2008
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	08/30/2011
Discharge Name:	Coast Community College Dist
Discharge Address:	1370 Adams Ave
Discharge City:	Costa Mesa
Discharge State:	California
Discharge Zip:	92626

LUST:

Region:	STATE
Global Id:	T0605900658
Latitude:	33.7334913
Longitude:	-118.0025061
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	07/21/2000

GOLDEN WEST COLLEGE (Continued) **1000597079**

Lead Agency: ORANGE COUNTY LOP
Case Worker: GH
Local Agency: ORANGE COUNTY LOP
RB Case Number: 083000836T
LOC Case Number: 88UT048
File Location: Local Agency
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:
Global Id: T0605900658
Contact Type: Regional Board Caseworker
Contact Name: TOM E. MBEKE-EKANEM
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 MAIN STREET, SUITE 500
City: RIVERSIDE
Email: tmbeke-ekanem@waterboards.ca.gov
Phone Number: 9513202007

Global Id: T0605900658
Contact Type: Local Agency Caseworker
Contact Name: GENIECE HIGGINS
Organization Name: ORANGE COUNTY LOP
Address: 1241 EAST DYER ROAD SUITE 120
City: SANTA ANA
Email: ghiggins@ochca.com
Phone Number: 7144336260

Status History:
Global Id: T0605900658
Status: Completed - Case Closed
Status Date: 07/21/2000

Global Id: T0605900658
Status: Open - Case Begin Date
Status Date: 03/09/1988

Regulatory Activities:
Global Id: T0605900658
Action Type: ENFORCEMENT
Date: 02/10/2000
Action: LOP Case Closure Summary to RB

Global Id: T0605900658
Action Type: Other
Date: 01/01/1950
Action: Leak Discovery

Global Id: T0605900658
Action Type: REMEDIATION
Date: 01/01/1950
Action: Free Product Removal

Global Id: T0605900658

GOLDEN WEST COLLEGE (Continued) **1000597079**

Action Type: Other
Date: 01/01/1950
Action: Leak Reported

ORANGE CO. LUST:
Region: ORANGE
Facility Id: 88UT048
Current Status: Certification (Case Closed)
Released Substance: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed: 07/21/2000
Case Type: Other Ground Water
Record ID: RO0001990

LUST REG 8:
Region: 8
County: Orange
Regional Board: Santa Ana Region
Facility Status: Case Closed
Case Number: 083000836T
Local Case Num: 88UT048
Case Type: Other ground water affected
Substance: Gasoline
Qty Leaked: 0
Abate Method: Not reported
Cross Street: Not reported
Enf Type: Not reported
Funding: Not reported
How Discovered: Tank Closure
How Stopped: Close Tank
Leak Cause: Unknown
Leak Source: Unknown
Global ID: T0605900658
How Stopped Date: 9/9/9999
Enter Date: Not reported
Review Date: Not reported
Prelim Assess: Not reported
Discover Date: 3/9/1988
Enforcement Date: Not reported
Close Date: 7/21/2000
Workplan: Not reported
Pollution Char: Not reported
Remed Plan: Not reported
Remed Action: Not reported
Monitoring: Not reported
Enter Date: Not reported
GW Qualifies: Not reported
Soil Qualifies: Not reported
Operator: Not reported
Facility Contact: Not reported
Interim: Not reported
Oversite Program: LUST
Latitude: 33.6681552
Longitude: -117.9698014
MTBE Date: Not reported
Max MTBE GW: Not reported

GOLDEN WEST COLLEGE (Continued) **1000597079**

MTBE Concentration: 0
Max MTBE Soil: Not reported
MTBE Fuel: 1
MTBE Tested: Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
MTBE Class: *
Staff: TME
Staff Initials: AR
Lead Agency: Local Agency
Local Agency: 30000L
Hydr Basin #: Not reported
Beneficial: MUN
Priority: Not reported
Cleanup Fund Id: Not reported
Work Suspended: Not reported
Summary: Not reported

CA FID UST:
Facility ID: 30001835
Regulated By: UTNKA
Regulated ID: Not reported
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 7148958158
Mail To: Not reported
Mailing Address: 15744 GOLDEN WEST
Mailing Address 2: Not reported
Mailing City,St,Zip: HUNTINGTON BEACH 92647
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

NY MANIFEST:
EPA ID: CAD983610759
Country: USA
Mailing Name: GOLDEN WEST COLLEGE
Mailing Contact: BEN KOLLMEYER
Mailing Address: 1370 ADAMS AVE
Mailing Address 2: Not reported
Mailing City: COSTA MESA
Mailing State: CA
Mailing Zip: 92626
Mailing Zip4: Not reported
Mailing Country: USA
Mailing Phone: 714-438-4728

Document ID: NYB7731648
Manifest Status: Completed after the designated time period for a TSDF to get a copy to the DEC
Trans1 State ID: 11340PNY
Trans2 State ID: Not reported
Generator Ship Date: 970307
Trans1 Recv Date: 970307

GOLDEN WEST COLLEGE (Continued) **1000597079**

Trans2 Recv Date:	Not reported
TSD Site Recv Date:	970321
Part A Recv Date:	Not reported
Part B Recv Date:	970402
Generator EPA ID:	CAD983610759
Trans1 EPA ID:	NYD980769947
Trans2 EPA ID:	Not reported
TSDF ID:	NYD000632372
Waste Code:	D001 - NON-LISTED IGNITABLE WASTES
Quantity:	01800
Units:	P - Pounds
Number of Containers:	009
Container Type:	CY - Cylinders
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100
Year:	97

SWEEPS UST:

Status:	Active
Comp Number:	8123
Number:	9
Board Of Equalization:	44-016672
Referral Date:	09-30-92
Action Date:	09-15-92
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	Not reported
Swrcb Tank Id:	30-000-008123-000001
Actv Date:	Not reported
Capacity:	2500
Tank Use:	M.V. FUEL
Stg:	P
Content:	REG UNLEADED
Number Of Tanks:	2

Status:	Active
Comp Number:	8123
Number:	9
Board Of Equalization:	44-016672
Referral Date:	09-30-92
Action Date:	09-15-92
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	Not reported
Swrcb Tank Id:	30-000-008123-000003
Actv Date:	Not reported
Capacity:	550
Tank Use:	M.V. FUEL
Stg:	P
Content:	DIESEL
Number Of Tanks:	Not reported

A4 **GOLDEN WEST COLLEGE** **CA LUST** **U001577263**
Target **15744 GOLDENWEST ST** **CA UST** **N/A**
Property **HUNTINGTON BEACH, CA 92647** **CA HIST UST**

Site 4 of 5 in cluster A

Actual:
23 ft.

LUST:

Region:	STATE
Global Id:	T10000001790
Latitude:	33.735491
Longitude:	-118.004608
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	06/29/2012
Lead Agency:	ORANGE COUNTY LOP
Case Worker:	GH
Local Agency:	ORANGE COUNTY LOP
RB Case Number:	Not reported
LOC Case Number:	10UT004
File Location:	Local Agency
Potential Media Affect:	Not reported
Potential Contaminants of Concern:	Gasoline
Site History:	Please refer to recent Site Documents or Monitoring Reports in GeoTracker for site history. Orange County is not responsible for the accuracy of any professional interpretations provided in reports submitted by consultants for the responsible party.

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T10000001790
Contact Type:	Local Agency Caseworker
Contact Name:	GENIECE HIGGINS
Organization Name:	ORANGE COUNTY LOP
Address:	1241 EAST DYER ROAD SUITE 120
City:	SANTA ANA
Email:	ghiggins@ochca.com
Phone Number:	7144336260

Global Id:	T10000001790
Contact Type:	Regional Board Caseworker
Contact Name:	TOM E. MBEKE-EKANEM
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500
City:	RIVERSIDE
Email:	tmbeke-ekanem@waterboards.ca.gov
Phone Number:	9513202007

Status History:

Global Id:	T10000001790
Status:	Completed - Case Closed
Status Date:	06/29/2012

Global Id:	T10000001790
Status:	Open - Case Begin Date
Status Date:	01/07/2010

Global Id:	T10000001790
Status:	Open - Site Assessment

GOLDEN WEST COLLEGE (Continued) **U001577263**

Status Date: 02/01/2010

Global Id: T10000001790
Status: Open - Verification Monitoring
Status Date: 05/20/2010

Regulatory Activities:
Global Id: T10000001790
Action Type: ENFORCEMENT
Date: 06/29/2012
Action: Staff Letter

Global Id: T10000001790
Action Type: ENFORCEMENT
Date: 06/29/2012
Action: Closure/No Further Action Letter

Global Id: T10000001790
Action Type: ENFORCEMENT
Date: 03/27/2012
Action: Notification - Fee Title Owners Notice

Global Id: T10000001790
Action Type: REMEDIATION
Date: 01/01/1950
Action: Excavation

Global Id: T10000001790
Action Type: ENFORCEMENT
Date: 02/01/2010
Action: Notice of Responsibility

Global Id: T10000001790
Action Type: ENFORCEMENT
Date: 02/01/2010
Action: Staff Letter

Global Id: T10000001790
Action Type: Other
Date: 01/01/1950
Action: Leak Stopped

Global Id: T10000001790
Action Type: ENFORCEMENT
Date: 05/03/2012
Action: Notification - Preclosure

Global Id: T10000001790
Action Type: Other
Date: 01/01/1950
Action: Leak Discovery

Global Id: T10000001790
Action Type: ENFORCEMENT
Date: 03/26/2010
Action: Staff Letter

GOLDEN WEST COLLEGE (Continued) **U001577263**

Global Id: T10000001790
Action Type: ENFORCEMENT
Date: 03/11/2011
Action: File Review - Closure

Global Id: T10000001790
Action Type: Other
Date: 01/01/1950
Action: Leak Reported

ORANGE CO. LUST:
Region: ORANGE
Facility Id: 10UT004
Current Status: Leak Being Confirmed
Released Substance: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed: 06/29/2012
Case Type: Undetermined
Record ID: RO0003539

UST:
Facility ID: 8123
Latitude: 33.73334
Longitude: -118.00684

HIST UST:
Region: STATE
Facility ID: 00000042508
Facility Type: Other
Other Type: COLLEGE
Total Tanks: 0002
Contact Name: STEVE CONE
Telephone: 7148958158
Owner Name: GOLDEN WEST COLLEGE (COAST COM
Owner Address: 15744 GOLDEN WEST ST.
Owner City,St,Zip: HUNTINGTON BEACH, CA 92647

Tank Num: 001
Container Num: 2
Year Installed: 1976
Tank Capacity: 00001000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Tank Construction: STEEL unknown
Leak Detection: Visual, Stock Inventor

Tank Num: 002
Container Num: 1
Year Installed: 1971
Tank Capacity: 00001000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Tank Construction: STEEL unknown
Leak Detection: Visual, Stock Inventor

A5 **GOLDEN WEST COLLEGE** **ICIS** **1011598274**
Target **15744 GOLDEN WEST ST HUNTINGTON BEACH CA 92647** **N/A**
Property **HUNTINGTON BEACH, CA 92647**

Site 5 of 5 in cluster A

Actual:
23 ft.

ICIS:

Enforcement Action ID:	09-1992-0072
FRS ID:	110002864062
Program ID:	NCDB I09#19900808CA013 1
Action Name:	GOLDEN WEST COLLEGE
Facility Name:	GOLDEN WEST COLLEGE
Facility Address:	15744 GOLDEN WEST ST HUNTINGTON BEACH CA 92647 HUNTINGTON BEACH, California 92647
Enforcement Action Type:	TSCA 16 Action For Penalty
Facility County:	Orange
EPA Region #:	9

Enforcement Action ID:	09-1992-0072
FRS ID:	110002864062
Program ID:	RCRAINFO CAD983610759
Action Name:	GOLDEN WEST COLLEGE
Facility Name:	GOLDEN WEST COLLEGE
Facility Address:	15744 GOLDEN WEST ST HUNTINGTON BEACH CA 92647 HUNTINGTON BEACH, California 92647
Enforcement Action Type:	TSCA 16 Action For Penalty
Facility County:	Orange
EPA Region #:	9

Enforcement Action ID:	09-1992-0072
FRS ID:	110002864062
Program ID:	NCDB D09#D91-0313-02
Action Name:	GOLDEN WEST COLLEGE
Facility Name:	GOLDEN WEST COLLEGE
Facility Address:	15744 GOLDEN WEST ST HUNTINGTON BEACH CA 92647 HUNTINGTON BEACH, California 92647
Enforcement Action Type:	TSCA 16 Action For Penalty
Facility County:	Orange
EPA Region #:	9

Enforcement Action ID:	09-1992-0072
FRS ID:	110002864062
Program ID:	HWTS-DATAMART CAD983610759
Action Name:	GOLDEN WEST COLLEGE
Facility Name:	COAST COMM COLLEGE DIST-GOLDEN WEST
Facility Address:	15744 GOLDEN WEST ST HUNTINGTON BEACH CA 92647 HUNTINGTON BEACH, California 92647
Enforcement Action Type:	TSCA 16 Action For Penalty
Facility County:	Orange
EPA Region #:	9

Enforcement Action ID:	09-1992-0072
FRS ID:	110002864062
Program ID:	FRS 110002864062
Action Name:	GOLDEN WEST COLLEGE
Facility Name:	GOLDEN WEST COLLEGE
Facility Address:	15744 GOLDEN WEST ST HUNTINGTON BEACH CA 92647 HUNTINGTON BEACH, California 92647
Enforcement Action Type:	TSCA 16 Action For Penalty

GOLDEN WEST COLLEGE (Continued) **1011598274**

Facility County: Orange
EPA Region #: 9

Enforcement Action ID: 09-1992-0072
FRS ID: 110002864062
Program ID: BR CAD983610759
Action Name: GOLDEN WEST COLLEGE
Facility Name: GOLDEN WEST COLLEGE
Facility Address: 15744 GOLDEN WEST ST HUNTINGTON BEACH CA 92647
HUNTINGTON BEACH, California 92647
Enforcement Action Type: TSCA 16 Action For Penalty
Facility County: Orange
EPA Region #: 9

Enforcement Action ID: 09-1992-0072
FRS ID: 110002864062
Program ID: GNIS 1702639
Action Name: GOLDEN WEST COLLEGE
Facility Name: GOLDEN WEST COLLEGE
Facility Address: 15744 GOLDEN WEST ST HUNTINGTON BEACH CA 92647
HUNTINGTON BEACH, California 92647
Enforcement Action Type: TSCA 16 Action For Penalty
Facility County: Orange
EPA Region #: 9

Program ID: BR CAD983610759
Facility Name: GOLDEN WEST COLLEGE
Address: 15744 GOLDEN WEST ST
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported
Latitude: 33.73217
Longitude: -118.006817

Program ID: FRS 110002864062
Facility Name: GOLDEN WEST COLLEGE
Address: 15744 GOLDEN WEST ST
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported
Latitude: 33.73217
Longitude: -118.006817

Program ID: GNIS 1702639
Facility Name: GOLDEN WEST COLLEGE
Address: 15744 GOLDEN WEST ST
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported
Latitude: 33.73217
Longitude: -118.006817

Program ID: HWTS-DATAMART CAD983610759

GOLDEN WEST COLLEGE (Continued) **1011598274**

Facility Name:	GOLDEN WEST COLLEGE
Address:	15744 GOLDEN WEST ST
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not reported
SIC Code:	Not reported
Latitude:	33.73217
Longitude:	-118.006817

Program ID:	NCDB D09#D91-0313-02
Facility Name:	GOLDEN WEST COLLEGE
Address:	15744 GOLDEN WEST ST
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not reported
SIC Code:	Not reported
Latitude:	33.73217
Longitude:	-118.006817

Program ID:	NCDB I09#19900808CA013 1
Facility Name:	GOLDEN WEST COLLEGE
Address:	15744 GOLDEN WEST ST
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not reported
SIC Code:	Not reported
Latitude:	33.73217
Longitude:	-118.006817

Program ID:	RCRAINFO CAD983610759
Facility Name:	GOLDEN WEST COLLEGE
Address:	15744 GOLDEN WEST ST
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not reported
SIC Code:	Not reported
Latitude:	33.73217
Longitude:	-118.006817

B6 **ARCO** **CA HIST UST** **U001577251**
South **7232 EDINGER AVE** **N/A**
< 1/8 **HUNTINGTON BEACH, CA 92647**
0.009 mi.
48 ft. **Site 1 of 6 in cluster B**

Relative:
Lower

Actual:
22 ft.

HIST UST:

Region:	STATE
Facility ID:	00000029950
Facility Type:	Gas Station
Other Type:	Not reported
Total Tanks:	0003
Contact Name:	HENSLEY BARBOUR
Telephone:	2132782160
Owner Name:	TESORO GASOLINE MARKETING CO.
Owner Address:	9201 W. OLYMPIC BLVD.
Owner City,St,Zip:	BEVERLY HILLS, CA 90212

Tank Num:	001

ARCO (Continued) **U001577251**

Container Num: 2
Year Installed: 1977
Tank Capacity: 00012000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Tank Construction: 1/4 inches
Leak Detection: Stock Inventor

Tank Num: 002
Container Num: 3
Year Installed: 1977
Tank Capacity: 00012000
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Tank Construction: 1/4 inches
Leak Detection: Stock Inventor

Tank Num: 003
Container Num: 1
Year Installed: 1977
Tank Capacity: 00012000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Tank Construction: 1/4 inches
Leak Detection: Stock Inventor

B7 **EDR US Hist Auto Stat** **1015616687**
South **7232 EDINGER AVE** **N/A**
< 1/8 **HUNTINGTON BEACH, CA 92647**
0.009 mi.
48 ft. **Site 2 of 6 in cluster B**

Relative:
Lower

Actual:
22 ft.

EDR Historical Auto Stations:
Name: CAR CLINIC THE
Year: 2011
Address: 7232 EDINGER AVE

Name: THE CAR CLINIC
Year: 2012
Address: 7232 EDINGER AVE

B8 **CA HIST CORTESE** **S100875682**
South **7232 EDINGER** **CA LUST** **N/A**
< 1/8 **HUNTINGTON BEACH, CA** **CA CHMIRS**
0.009 mi.
48 ft. **Site 3 of 6 in cluster B**

Relative:
Lower

Actual:
22 ft.

CORTESE:
Region: CORTESE
Facility County Code: 30
Reg By: LTNKA
Reg Id: 083000508T

LUST REG 8:
Region: 8
County: Orange

(Continued) **S100875682**

Regional Board: Santa Ana Region
Facility Status: Preliminary site assessment workplan submitted
Case Number: 083000508T
Local Case Num: 92UT005
Case Type: Soil only
Substance: Waste Oil
Qty Leaked: Not reported
Abate Method: Not reported
Cross Street: Not reported
Enf Type: Not reported
Funding: Not reported
How Discovered: OM
How Stopped: Not reported
Leak Cause: UNK
Leak Source: UNK
Global ID: T0605900405
How Stopped Date: Not reported
Enter Date: 2/4/1992
Review Date: 1/13/1992
Prelim Assess: Not reported
Discover Date: 1/13/1992
Enforcement Date: Not reported
Close Date: Not reported
Workplan: 1/24/1992
Pollution Char: Not reported
Remed Plan: Not reported
Remed Action: Not reported
Monitoring: Not reported
Enter Date: 2/4/1992
GW Qualifies: Not reported
Soil Qualifies: Not reported
Operator: Not reported
Facility Contact: Not reported
Interim: Not reported
Oversite Program: LUST
Latitude: 33.729842
Longitude: -118.0005853
MTBE Date: Not reported
Max MTBE GW: Not reported
MTBE Concentration: 0
Max MTBE Soil: Not reported
MTBE Fuel: 0
MTBE Tested: Not Required to be Tested.
MTBE Class: *
Staff: VJJ
Staff Initials: Not reported
Lead Agency: Local Agency
Local Agency: 30000
Hydr Basin #: COASTAL PLAIN OF ORA
Beneficial: Not reported
Priority: Not reported
Cleanup Fund Id: Not reported
Work Suspended: Not reported
Summary: Not reported

CHMIRS:
OES Incident Number: 02-5969

(Continued) **S100875682**

OES notification:	11/05/2002
OES Date:	Not reported
OES Time:	Not reported
Incident Date:	Not reported
Date Completed:	**Not reported**
Property Use:	Not reported
Agency Id Number:	Not reported
Agency Incident Number:	Not reported
Time Notified:	Not reported
Time Completed:	Not reported
Surrounding Area:	Not reported
Estimated Temperature:	Not reported
Property Management:	Not reported
Special Studies 1:	Not reported
Special Studies 2:	Not reported
Special Studies 3:	Not reported
Special Studies 4:	Not reported
Special Studies 5:	Not reported
Special Studies 6:	Not reported
More Than Two Substances Involved?:	Not reported
Resp Agncy Personel # Of Decontaminated:	Not reported
Responding Agency Personel # Of Injuries:	Not reported
Responding Agency Personel # Of Fatalities:	Not reported
Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA/DOT/PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Comments:	Not reported
Facility Telephone:	Not reported
Waterway Involved:	No
Waterway:	Not reported
Spill Site:	Not reported
Cleanup By:	Reporting Party
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Not reported
Other:	Not reported
Date/Time:	Not reported
Year:	2002
Agency:	City of Huntington Beach
Incident Date:	11/5/200212:00:00 AM
Admin Agency:	Huntington Beach Fire Department
Amount:	Not reported
Contained:	Yes
Site Type:	Road
E Date:	Not reported
Substance:	Sewage
Quantity Released:	Not reported
BBLS:	0

(Continued) **S100875682**

Cups:	0
CUFT:	0
Gallons:	551
Grams:	0
Pounds:	0
Liters:	0
Ounces:	0
Pints:	0
Quarts:	0
Sheen:	0
Tons:	0
Unknown:	0
Evacuations:	0
Number of Injuries:	0
Number of Fatalities:	0
Description:	Chunks of asphalt were thrown into manhole.

B9 **A SPARK AUTO SVC** **RCRA-SQG** **1000341654**
South **7232 EDINGER** **FINDS** **CAD000627430**
< 1/8 **HUNTINGTON BEACH, CA 92647** **CA UST**
0.009 mi.
48 ft. **Site 4 of 6 in cluster B**

Relative:
Lower

Actual:
22 ft.

RCRA-SQG:

Date form received by agency:	11/08/1991
Facility name:	A SPARK AUTO SVC
Facility address:	7232 EDINGER HUNTINGTON BEACH, CA 92647
EPA ID:	CAD000627430
Contact:	GARY LA FOUNTAIN
Contact address:	7232 EDINGER HUNTINGTON BEACH, CA 92647
Contact country:	US
Contact telephone:	(714) 842-3342
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	GRACE LAFOUNTAIN
Owner/operator address:	7232 EDINGER HUNTINGTON BEACH, CA 92647
Owner/operator country:	Not reported
Owner/operator telephone:	(714) 842-3342
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported
Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999

A SPARK AUTO SVC (Continued) **1000341654**

Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110002627435

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

UST:
Facility ID: 4386
Latitude: 33.7301
Longitude: -118.00322

B10 **EDR US Hist Cleaners** **1015090665**
SSW **7168 EDINGER AVE** **N/A**
< 1/8 **HUNTINGTON BEACH, CA 92647**
0.010 mi.
53 ft. **Site 5 of 6 in cluster B**

Relative:
Lower

Actual:
22 ft.

EDR Historical Cleaners:
Name: SAX QUALITY CLEANERS
Year: 1999
Address: 7168 EDINGER AVE

Name: SAX QUALITY CLEANERS
Year: 2001

(Continued) **1015090665**

Address: 7168 EDINGER AVE

Name: SAX QUALITY CLEANERS
Year: 2003
Address: 7168 EDINGER AVE

Name: SAX QUALITY CLEANERS
Year: 2004
Address: 7168 EDINGER AVE

Name: SAX QUALITY CLEANERS
Year: 2005
Address: 7168 EDINGER AVE

Name: SAX QUALITY CLEANERS
Year: 2006
Address: 7168 EDINGER AVE

Name: SAX CLEANERS
Year: 2008
Address: 7168 EDINGER AVE

Name: SAX QUALITY CLEANERS
Year: 2010
Address: 7168 EDINGER AVE

Name: SAX QUALITY CLEANERS
Year: 2011
Address: 7168 EDINGER AVE

Name: SAX QUALITY CLEANERS
Year: 2012
Address: 7168 EDINGER AVE

B11 **SAX QUALITY CLEANERS** **RCRA-SQG** **1000128937**
SSW **7168 EDINGER AVE** **FINDS** **CAD981627870**
< 1/8 **HUNTINGTON BEACH, CA** **CA DRYCLEANERS**
0.010 mi. **CA HAZNET**
53 ft. **Site 6 of 6 in cluster B** **CA EMI**

Relative:
Lower

Actual:
22 ft.

RCRA-SQG:
Date form received by agency: 09/01/1996
Facility name: SAX QUALITY CLEANERS
Facility address: 7168 EDINGER AVE
HUNTINGTON BEACH, CA 92647
EPA ID: CAD981627870
Contact: Not reported
Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 09
Land type: Facility is not located on Indian land. Additional information is not known.
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous

SAX QUALITY CLEANERS (Continued) **1000128937**

waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: NASRATYAR 21
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 12/05/1986
Facility name: SAX QUALITY CLEANERS
Classification: Large Quantity Generator

Violation Status: No violations found

Evaluation Action Summary:
Evaluation date: 01/26/1994
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State Contractor/Grantee

SAX QUALITY CLEANERS (Continued) **1000128937**

FINDS:

Registry ID: 110002730019

Environmental Interest/Information System
California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

DRYCLEANERS:

EPA Id:	CAD981627870
NAICS Code:	81232
NAICS Description:	Drycleaning and Laundry Services (except Coin-Operated)
SIC Code:	7211
SIC Description:	Power Laundries, Family and Commercial
Create Date:	04/10/1987
Facility Active:	Yes
Inactive Date:	Not reported
Facility Addr2:	Not reported
Owner Name:	ZAHIR NASRATYAR
Owner Address:	6552 DORAL DR
Owner Address 2:	Not reported
Owner Telephone:	7148488806
Contact Name:	ZAHIR NASRATYAR OWNER
Contact Address:	6552 DORAL DR
Contact Address 2:	Not reported
Contact Telephone:	7148488806
EDR Link ID:	CAD981627870

HAZNET:

Year:	2008
Gepaid:	CAD981627870
Contact:	ZAHIR NASRATYAR OWNER
Telephone:	7142744601
Mailing Name:	Not reported
Mailing Address:	7168 EDINGER AVE
Mailing City,St,Zip:	HUNTINGTON BEACH, CA 926470000
Gen County:	Not reported
TSD EPA ID:	NVR000076158
TSD County:	Not reported
Waste Category:	Hydrocarbon solvents (benzene, hexane, Stoddard, Etc.)
Disposal Method:	Solvents Recovery
Tons:	0.15
Facility County:	Orange

Year:	2008
Gepaid:	CAD981627870

SAX QUALITY CLEANERS (Continued) **1000128937**

Contact: ZAHIR NASRATYAR OWNER
Telephone: 7142744601
Mailing Name: Not reported
Mailing Address: 7168 EDINGER AVE
Mailing City,St,Zip: HUNTINGTON BEACH, CA 926470000
Gen County: Not reported
TSD EPA ID: NVR000076158
TSD County: Not reported
Waste Category: Halogenated solvents (chloroforms, methyl chloride, perchloroethylene, etc)
Disposal Method: Solvents Recovery
Tons: 0.1251
Facility County: Orange

Year: 2007
Gepaid: CAD981627870
Contact: ZAHIR NASRATYAR OWNER
Telephone: 7142744601
Mailing Name: Not reported
Mailing Address: 7168 EDINGER AVE
Mailing City,St,Zip: HUNTINGTON BEACH, CA 926470000
Gen County: Not reported
TSD EPA ID: NVR000076158
TSD County: Not reported
Waste Category: Hydrocarbon solvents (benzene, hexane, Stoddard, Etc.)
Disposal Method: Solvents Recovery
Tons: 0.25
Facility County: Orange

Year: 2007
Gepaid: CAD981627870
Contact: ZAHIR NASRATYAR OWNER
Telephone: 7142744601
Mailing Name: Not reported
Mailing Address: 7168 EDINGER AVE
Mailing City,St,Zip: HUNTINGTON BEACH, CA 926470000
Gen County: Not reported
TSD EPA ID: NVR000076158
TSD County: Not reported
Waste Category: Halogenated solvents (chloroforms, methyl chloride, perchloroethylene, etc)
Disposal Method: Solvents Recovery
Tons: 0.12
Facility County: Orange

Year: 2007
Gepaid: CAD981627870
Contact: ZAHIR NASRATYAR OWNER
Telephone: 7142744601
Mailing Name: Not reported
Mailing Address: 7168 EDINGER AVE
Mailing City,St,Zip: HUNTINGTON BEACH, CA 926470000
Gen County: Not reported
TSD EPA ID: NVR000076158
TSD County: Not reported
Waste Category: Aqueous solution with total organic residues less than 10 percent
Disposal Method: Solvents Recovery

SAX QUALITY CLEANERS (Continued) **1000128937**

Tons: Not reported
Facility County: Orange

Click this hyperlink while viewing on your computer to access
10 additional CA_HAZNET: record(s) in the EDR Site Report.

EMI:

Year:	1987
County Code:	30
Air Basin:	SC
Facility ID:	55234
Air District Name:	SC
SIC Code:	7216
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1990
County Code:	30
Air Basin:	SC
Facility ID:	55234
Air District Name:	SC
SIC Code:	7216
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

12
NNW
< 1/8
0.010 mi.
54 ft.

GOLDENWEST COLLEGE **CA HIST CORTESE** **S102430842**
7112 **N/A**
HUNTINGTON BEACH, CA 92646

Relative:
Higher

Actual:
26 ft.

CORTESE:

Region:	CORTESE
Facility County Code:	30
Reg By:	LTNKA
Reg Id:	083000836T

C13
SSW
< 1/8
0.010 mi.
55 ft.

7012 EDINGER AVE
HUNTINGTON BEACH, CA 92647

Site 1 of 16 in cluster C

EDR US Hist Auto Stat **1015606522**
N/A

Relative:
Lower

Actual:
22 ft.

EDR Historical Auto Stations:

Name:	CHEVRON AUTO CENTER
Year:	1999
Address:	7012 EDINGER AVE
Name:	CHEVRON AUTO CTR
Year:	2001
Address:	7012 EDINGER AVE
Name:	CHEVRON AUTO CTR
Year:	2003
Address:	7012 EDINGER AVE
Name:	CHEVRON AUTO CTR
Year:	2004
Address:	7012 EDINGER AVE

C14
SSW
< 1/8
0.010 mi.
55 ft.

CHEVRON 93603
7012 EDINGER AVE.
HUNTINGTON BEACH, CA 92647

Site 2 of 16 in cluster C

RCRA-SQG **1008194435**
CAD983569193

Relative:
Lower

Actual:
22 ft.

RCRA-SQG:

Date form received by agency:	02/24/2004
Facility name:	CHEVRON 93603
Facility address:	7012 EDINGER AVE. HUNTINGTON BEACH, CA 92647
EPA ID:	CAD983569193
Mailing address:	PO BOX 6004 SAN RAMON, CA 94583
Contact:	KATHY L NORRIS
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	(925) 842-5931
Contact email:	KNORRIS@CHEVRONTEXACO.COM
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CHEVRON PRODUCTS CO.
Owner/operator address:	PO BOX 6004 SAN RAMON, CA 94583
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner

CHEVRON 93603 (Continued) **1008194435**

Owner/Op start date: 09/15/1991
Owner/Op end date: Not reported

Owner/operator name: CHEVRON PRODUCTS CO.
Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 09/15/1991
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 02/24/2004
Facility name: CHEVRON 93603
Classification: Large Quantity Generator

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D018
Waste name: BENZENE

Violation Status: No violations found

C15 **CHEVRON STATION #93603** **CA UST** **U003982017**
SSW **7012 EDINGER AVE** **N/A**
< 1/8 **HUNTINGTON BEACH, CA 92647**
0.010 mi.
55 ft. **Site 3 of 16 in cluster C**

Relative:
Lower

Actual:
22 ft.

UST:
Facility ID: 2151
Latitude: 33.73006
Longitude: -118.00648

C16 **CHEVRON STATION #93603** **CA HIST CORTESE** **U001742686**
SSW **7012 EDINGER** **CA LUST** **N/A**
< 1/8 **HUNTINGTON BEACH, CA 92647** **CA FID UST**
0.010 mi. **CA SWEEPS UST**
55 ft. **Site 4 of 16 in cluster C**

Relative:
Lower

Actual:
22 ft.

CORTESE:
Region: CORTESE
Facility County Code: 30
Reg By: LTNKA
Reg Id: 083000108T

LUST:
Region: STATE
Global Id: T0605900083
Latitude: 33.729731
Longitude: -118.006364
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 09/24/2001
Lead Agency: ORANGE COUNTY LOP
Case Worker: KC
Local Agency: ORANGE COUNTY LOP
RB Case Number: 083000108T
LOC Case Number: 89UT135
File Location: Local Agency
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:
Global Id: T0605900083
Contact Type: Local Agency Caseworker
Contact Name: GENIECE HIGGINS
Organization Name: ORANGE COUNTY LOP
Address: 1241 EAST DYER ROAD SUITE 120
City: SANTA ANA
Email: ghiggins@ochca.com
Phone Number: 7144336260

Global Id: T0605900083
Contact Type: Regional Board Caseworker
Contact Name: TOM E. MBEKE-EKANEM
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 MAIN STREET, SUITE 500
City: RIVERSIDE
Email: tmbeke-ekanem@waterboards.ca.gov

CHEVRON STATION #93603 (Continued) **U001742686**

Phone Number: 9513202007

Status History:
Global Id: T0605900083
Status: Completed - Case Closed
Status Date: 09/24/2001

Global Id: T0605900083
Status: Open - Case Begin Date
Status Date: 08/29/1988

Regulatory Activities:
Global Id: T0605900083
Action Type: Other
Date: 01/01/1950
Action: Leak Discovery

Global Id: T0605900083
Action Type: Other
Date: 01/01/1950
Action: Leak Reported

Region: STATE
Global Id: T0605993609
Latitude: 33.729423
Longitude: -118.005646
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 06/30/2011
Lead Agency: ORANGE COUNTY LOP
Case Worker: GH
Local Agency: ORANGE COUNTY LOP
RB Case Number: Not reported
LOC Case Number: 04UT006
File Location: Local Agency
Potential Media Affect: Aquifer used for drinking water supply
Potential Contaminants of Concern: Gasoline
Site History: Please refer to recent Site Documents or Monitoring Reports in GeoTracker for site history. Orange County is not responsible for the accuracy of any professional interpretations provided in reports submitted by consultants for the responsible party.

Click here to access the California GeoTracker records for this facility:

Contact:
Global Id: T0605993609
Contact Type: Local Agency Caseworker
Contact Name: GENIECE HIGGINS
Organization Name: ORANGE COUNTY LOP
Address: 1241 EAST DYER ROAD SUITE 120
City: SANTA ANA
Email: ghiggins@ochca.com
Phone Number: 7144336260

Global Id: T0605993609
Contact Type: Regional Board Caseworker

CHEVRON STATION #93603 (Continued) **U001742686**

Contact Name: TOM E. MBEKE-EKANEM
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 MAIN STREET, SUITE 500
City: RIVERSIDE
Email: tmbeke-ekanem@waterboards.ca.gov
Phone Number: 9513202007

Status History:
Global Id: T0605993609
Status: Completed - Case Closed
Status Date: 06/30/2011

Global Id: T0605993609
Status: Open - Case Begin Date
Status Date: 10/10/2003

Global Id: T0605993609
Status: Open - Site Assessment
Status Date: 01/27/2004

Global Id: T0605993609
Status: Open - Site Assessment
Status Date: 06/10/2004

Global Id: T0605993609
Status: Open - Verification Monitoring
Status Date: 03/19/2009

Regulatory Activities:
Global Id: T0605993609
Action Type: Other
Date: 01/01/1950
Action: Leak Reported

Global Id: T0605993609
Action Type: REMEDIATION
Date: 01/01/1950
Action: Other (Use Description Field)

Global Id: T0605993609
Action Type: ENFORCEMENT
Date: 06/30/2011
Action: Closure/No Further Action Letter

Global Id: T0605993609
Action Type: ENFORCEMENT
Date: 01/27/2004
Action: Notice of Responsibility

Global Id: T0605993609
Action Type: ENFORCEMENT
Date: 12/17/2004
Action: Staff Letter

Global Id: T0605993609
Action Type: ENFORCEMENT

CHEVRON STATION #93603 (Continued) **U001742686**

Date: 07/07/2004
Action: Staff Letter

Global Id: T0605993609
Action Type: REMEDIATION
Date: 01/01/1950
Action: In Situ Biological Treatment

Global Id: T0605993609
Action Type: ENFORCEMENT
Date: 09/29/2008
Action: Staff Letter

Global Id: T0605993609
Action Type: ENFORCEMENT
Date: 07/07/2009
Action: Staff Letter

Global Id: T0605993609
Action Type: Other
Date: 01/01/1950
Action: Leak Discovery

Global Id: T0605993609
Action Type: ENFORCEMENT
Date: 04/01/2011
Action: Staff Letter

ORANGE CO. LUST:
Region: ORANGE
Facility Id: 89UT135
Current Status: Certification (Case Closed)
Released Substance: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed: 09/24/2001
Case Type: Other Ground Water
Record ID: RO0002368

LUST REG 8:
Region: 8
County: Orange
Regional Board: Santa Ana Region
Facility Status: Case Closed
Case Number: 083000108T
Local Case Num: 89UT135
Case Type: Other ground water affected
Substance: Gasoline
Qty Leaked: 0
Abate Method: Not reported
Cross Street: Not reported
Enf Type: Not reported
Funding: Not reported
How Discovered: Tank Closure
How Stopped: Close Tank
Leak Cause: Unknown
Leak Source: Unknown

CHEVRON STATION #93603 (Continued) **U001742686**

Global ID:	T0605900083
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Review Date:	Not reported
Prelim Assess:	Not reported
Discover Date:	8/29/1988
Enforcement Date:	Not reported
Close Date:	9/24/2001
Workplan:	Not reported
Pollution Char:	Not reported
Remed Plan:	Not reported
Remed Action:	Not reported
Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.7298181
Longitude:	-118.0062175
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
MTBE Class:	*
Staff:	TME
Staff Initials:	KC
Lead Agency:	Local Agency
Local Agency:	30000L
Hydr Basin #:	Not reported
Beneficial:	MUN
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported

Summary: Not reported

Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Preliminary site assessment workplan submitted
Case Number:	Not reported
Local Case Num:	04UT006
Case Type:	Other ground water affected
Substance:	Gasoline
Qty Leaked:	0
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	SEL
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Close Tank
Leak Cause:	Unknown
Leak Source:	Tank

CHEVRON STATION #93603 (Continued) **U001742686**

Global ID: T0605993609
How Stopped Date: 9/9/9999
Enter Date: Not reported
Review Date: 1/27/2004
Prelim Assess: Not reported
Discover Date: 10/10/2003
Enforcement Date: Not reported
Close Date: Not reported
Workplan: 6/10/2004
Pollution Char: Not reported
Remed Plan: Not reported
Remed Action: Not reported
Monitoring: Not reported
Enter Date: Not reported
GW Qualifies: =
Soil Qualifies: =
Operator: Not reported
Facility Contact: Not reported
Interim: Not reported
Oversite Program: LUST
Latitude: 0
Longitude: 0
MTBE Date: 8/30/2004
Max MTBE GW: 20000
MTBE Concentration: 0
Max MTBE Soil: 2400
MTBE Fuel: 1
MTBE Tested: MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class: *
Staff: TME
Staff Initials: KC
Lead Agency: Local Agency
Local Agency: 30000L
Hydr Basin #: Not reported
Beneficial: MUN
Priority: Not reported
Cleanup Fund Id: Not reported
Work Suspended: Not reported
Summary: Not reported

CA FID UST:
Facility ID: 30000470
Regulated By: UTNKA
Regulated ID: Not reported
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 7148487888
Mail To: Not reported
Mailing Address: P O BOX 2833 1300 S
Mailing Address 2: Not reported
Mailing City,St,Zip: HUNTINGTON BEACH 92647
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported

CHEVRON STATION #93603 (Continued) **U001742686**

Status: Active

SWEEPS UST:
Status: Active
Comp Number: 2151
Number: 9
Board Of Equalization: 44-015918
Referral Date: 09-30-92
Action Date: 09-15-92
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: Not reported
Swrcb Tank Id: 30-000-002151-000001
Actv Date: Not reported
Capacity: 1000
Tank Use: PETROLEUM
Stg: P
Content: Not reported
Number Of Tanks: 4

Status: Active
Comp Number: 2151
Number: 9
Board Of Equalization: 44-015918
Referral Date: 09-30-92
Action Date: 09-15-92
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: Not reported
Swrcb Tank Id: 30-000-002151-000004
Actv Date: Not reported
Capacity: 10000
Tank Use: M.V. FUEL
Stg: P
Content: REG UNLEADED
Number Of Tanks: Not reported

Status: Active
Comp Number: 2151
Number: 9
Board Of Equalization: 44-015918
Referral Date: 09-30-92
Action Date: 09-15-92
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: Not reported
Swrcb Tank Id: 30-000-002151-000005
Actv Date: Not reported
Capacity: 10000
Tank Use: M.V. FUEL
Stg: P
Content: REG UNLEADED
Number Of Tanks: Not reported

Status: Active
Comp Number: 2151
Number: 9

CHEVRON STATION #93603 (Continued) **U001742686**

Board Of Equalization:	44-015918
Referral Date:	09-30-92
Action Date:	09-15-92
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	Not reported
Swrcb Tank Id:	30-000-002151-000006
Actv Date:	Not reported
Capacity:	10000
Tank Use:	M.V. FUEL
Stg:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported

C17 **CHEVRON STATION NO 93603** **RCRA-SQG** **1000595029**
SSW **7012 EDINGER AVE.** **FINDS** **CAD983589193**
< 1/8 **HUNTINGTON BEACH, CA**
0.010 mi.
55 ft. **Site 5 of 16 in cluster C**

Relative:
Lower

Actual:
22 ft.

RCRA-SQG:

Date form received by agency:	05/16/2002
Facility name:	CHEVRON STATION NO 93603
Facility address:	7012 EDINGER AVE HUNTINGTON BEACH, CA 926473503
EPA ID:	CAD983589193
Mailing address:	P O BOX 6004 SAN RAMON, CA 94583
Contact:	KATHY NORRIS
Contact address:	P O BOX 6004 SAN RAMON, CA 94583
Contact country:	US
Contact telephone:	(925) 842-5931
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CHEVRON PRODUCTS CO
Owner/operator address:	P O BOX 6004 SAN RAMON, CA 94583
Owner/operator country:	Not reported
Owner/operator telephone:	(925) 842-5931
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported
Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported

CHEVRON STATION NO 93603 (Continued) **1000595029**

Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D018
Waste name: BENZENE

Violation Status: No violations found

FINDS:

Registry ID: 110002849259

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HAZARDOUS WASTE BIENNIAL REPORTER

C18
SSW
< 1/8
0.010 mi.
55 ft.

Relative:
Lower

Actual:
22 ft.

93603
7012 EDINGER AVE
HUNTINGTON BEACH, CA 92647

Site 6 of 16 in cluster C

CA HIST UST | **U001577249** | **N/A**

HIST UST:

Region:	STATE
Facility ID:	00000062474
Facility Type:	Gas Station
Other Type:	Not reported
Total Tanks:	0004
Contact Name:	MANOS,CHARLES
Telephone:	7148487888
Owner Name:	CHEVRON U.S.A. INC.
Owner Address:	575 MARKET
Owner City,St,Zip:	SAN FRANCISCO, CA 94105

Tank Num:	001
Container Num:	1
Year Installed:	1967
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	Not reported
Tank Construction:	0000250 unknown
Leak Detection:	Stock Inventor

Tank Num:	002
Container Num:	2
Year Installed:	1967
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	Not reported
Tank Construction:	0000250 unknown
Leak Detection:	Stock Inventor

Tank Num:	003
Container Num:	3
Year Installed:	1967
Tank Capacity:	00005000
Tank Used for:	PRODUCT
Type of Fuel:	Not reported
Tank Construction:	0000250 unknown
Leak Detection:	Stock Inventor

Tank Num:	004
Container Num:	4
Year Installed:	1967
Tank Capacity:	00001000
Tank Used for:	WASTE
Type of Fuel:	Not reported
Tank Construction:	0000130 unknown
Leak Detection:	Stock Inventor

D19 **QUALITY STATION #552** **CA UST** **U003941218**
SSE **7252 EDINGER AVE # 552** **N/A**
< 1/8 **HUNTINGTON BEACH, CA 92647**
0.011 mi.
57 ft. **Site 1 of 3 in cluster D**

Relative:
Lower

Actual:
21 ft.

UST:
Facility ID: 11537
Latitude: 33.73009
Longitude: -118.00244

D20 **QUALITY GAS #552** **CA LUST** **S102435536**
SSE **7252 EDINGER AVE** **N/A**
< 1/8 **HUNTINGTON BEACH, CA 92647**
0.011 mi.
57 ft. **Site 2 of 3 in cluster D**

Relative:
Lower

Actual:
21 ft.

LUST REG 8:

Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Remedial action (cleanup) Underway
Case Number:	083000850T
Local Case Num:	88UT068
Case Type:	Other ground water affected
Substance:	Gasoline
Qty Leaked:	0
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	SEL
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Close Tank
Leak Cause:	Unknown
Leak Source:	Unknown
Global ID:	T0605900671
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Review Date:	Not reported
Prelim Assess:	Not reported
Discover Date:	7/23/1987
Enforcement Date:	Not reported
Close Date:	Not reported
Workplan:	Not reported
Pollution Char:	Not reported
Remed Plan:	Not reported
Remed Action:	1/1/1965
Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	=
Soil Qualifies:	=
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.729843
Longitude:	-118.0000913
MTBE Date:	12/18/2001
Max MTBE GW:	14000
MTBE Concentration:	0

QUALITY GAS #552 (Continued) **S102435536**

Max MTBE Soil: 320
MTBE Fuel: 1
MTBE Tested: MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class: *
Staff: VJJ
Staff Initials: KC
Lead Agency: Local Agency
Local Agency: 30000L
Hydr Basin #: Not reported
Beneficial: MUN
Priority: Not reported
Cleanup Fund Id: Not reported
Work Suspended: Not reported
Summary: Not reported

D21 **QUALITY STATION #552** **CA HIST CORTESE** **S101588999**
SSE **7252 EDINGER AVE** **CA LUST** **N/A**
< 1/8 **HUNTINGTON BEACH, CA 92647** **CA FID UST**
0.011 mi. **CA SWEEPS UST**
57 ft. **Site 3 of 3 in cluster D** **CA ENF**

Relative:
Lower

Actual:
21 ft.

CORTESE:
Region: CORTESE
Facility County Code: 30
Reg By: LTNKA
Reg Id: 083000850T

LUST:
Region: STATE
Global Id: T0605900671
Latitude: 33.7295507514924
Longitude: -118.003334999084
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 12/07/2011
Lead Agency: ORANGE COUNTY LOP
Case Worker: GH
Local Agency: ORANGE COUNTY LOP
RB Case Number: 083000850T
LOC Case Number: 88UT068
File Location: Local Agency
Potential Media Affect: Aquifer used for drinking water supply
Potential Contaminants of Concern: Gasoline
Site History: Please refer to recent Site Documents or Monitoring Reports in GeoTracker for site history. Orange County is not responsible for the accuracy of any professional interpretations provided in reports submitted by consultants for the responsible party.

Click here to access the California GeoTracker records for this facility:

Contact:
Global Id: T0605900671
Contact Type: Local Agency Caseworker
Contact Name: GENIECE HIGGINS
Organization Name: ORANGE COUNTY LOP
Address: 1241 EAST DYER ROAD SUITE 120
City: SANTA ANA
Email: ghiggins@ochca.com

QUALITY STATION #552 (Continued) **S101588999**

Phone Number: 7144336260

Global Id: T0605900671
Contact Type: Regional Board Caseworker
Contact Name: VALERIE JAHN-BULL
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 MAIN STREET, SUITE 500
City: RIVERSIDE
Email: vjahn-bull@waterboards.ca.gov
Phone Number: 9517824903

Status History:
Global Id: T0605900671
Status: Completed - Case Closed
Status Date: 12/07/2011

Global Id: T0605900671
Status: Open - Case Begin Date
Status Date: 07/23/1987

Global Id: T0605900671
Status: Open - Remediation
Status Date: 07/23/1987

Global Id: T0605900671
Status: Open - Site Assessment
Status Date: 04/22/2009

Global Id: T0605900671
Status: Open - Verification Monitoring
Status Date: 12/01/2010

Regulatory Activities:
Global Id: T0605900671
Action Type: ENFORCEMENT
Date: 10/17/2011
Action: Notification - Preclosure

Global Id: T0605900671
Action Type: ENFORCEMENT
Date: 09/18/2009
Action: Staff Letter

Global Id: T0605900671
Action Type: ENFORCEMENT
Date: 11/24/2009
Action: Staff Letter

Global Id: T0605900671
Action Type: ENFORCEMENT
Date: 11/23/2009
Action: Staff Letter

Global Id: T0605900671
Action Type: Other
Date: 01/01/1950

QUALITY STATION #552 (Continued) **S101588999**

Action:	Leak Began
Global Id:	T0605900671
Action Type:	ENFORCEMENT
Date:	07/28/2009
Action:	Staff Letter
Global Id:	T0605900671
Action Type:	ENFORCEMENT
Date:	09/22/2011
Action:	Notification - Fee Title Owners Notice
Global Id:	T0605900671
Action Type:	ENFORCEMENT
Date:	12/07/2011
Action:	Closure/No Further Action Letter
Global Id:	T0605900671
Action Type:	ENFORCEMENT
Date:	09/22/2011
Action:	Notification - Fee Title Owners Notice
Global Id:	T0605900671
Action Type:	ENFORCEMENT
Date:	10/06/2005
Action:	Staff Letter
Global Id:	T0605900671
Action Type:	ENFORCEMENT
Date:	05/18/1989
Action:	Court Injunction
Global Id:	T0605900671
Action Type:	ENFORCEMENT
Date:	03/21/2003
Action:	Staff Letter
Global Id:	T0605900671
Action Type:	ENFORCEMENT
Date:	07/18/2005
Action:	* Corrective Action Orders
Global Id:	T0605900671
Action Type:	ENFORCEMENT
Date:	06/02/2008
Action:	Staff Letter
Global Id:	T0605900671
Action Type:	ENFORCEMENT
Date:	06/16/2006
Action:	Staff Letter
Global Id:	T0605900671
Action Type:	REMEDIATION
Date:	01/01/1950
Action:	Pump & Treat (P&T) Groundwater

QUALITY STATION #552 (Continued) **S101588999**

Global Id: T0605900671
Action Type: Other
Date: 01/01/1950
Action: Leak Discovery

Global Id: T0605900671
Action Type: ENFORCEMENT
Date: 12/26/2007
Action: Staff Letter

Global Id: T0605900671
Action Type: ENFORCEMENT
Date: 07/07/2009
Action: Staff Letter

Global Id: T0605900671
Action Type: ENFORCEMENT
Date: 11/03/2009
Action: Staff Letter

Global Id: T0605900671
Action Type: ENFORCEMENT
Date: 09/10/2009
Action: Staff Letter

Global Id: T0605900671
Action Type: REMEDIATION
Date: 01/01/1950
Action: In Situ Physical/Chemical Treatment (other than SVE)

Global Id: T0605900671
Action Type: REMEDIATION
Date: 01/01/1950
Action: Soil Vapor Extraction (SVE)

Global Id: T0605900671
Action Type: RESPONSE
Date: 11/22/2010
Action: Other Report / Document

Global Id: T0605900671
Action Type: ENFORCEMENT
Date: 03/23/2010
Action: Staff Letter

Global Id: T0605900671
Action Type: ENFORCEMENT
Date: 04/28/2009
Action: Staff Letter

Global Id: T0605900671
Action Type: ENFORCEMENT
Date: 07/28/2008
Action: Staff Letter

Global Id: T0605900671
Action Type: ENFORCEMENT

QUALITY STATION #552 (Continued) **S101588999**

Date: 10/19/2010
Action: Staff Letter

Global Id: T0605900671
Action Type: ENFORCEMENT
Date: 09/22/2011
Action: Notification - Fee Title Owners Notice

Global Id: T0605900671
Action Type: ENFORCEMENT
Date: 09/22/2011
Action: Notification - Fee Title Owners Notice

Global Id: T0605900671
Action Type: ENFORCEMENT
Date: 09/22/2011
Action: Notification - Fee Title Owners Notice

Global Id: T0605900671
Action Type: Other
Date: 01/01/1950
Action: Leak Reported

ORANGE CO. LUST:
Region: ORANGE
Facility Id: 88UT068
Current Status: Certification (Case Closed)
Released Substance: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed: 12/07/2011
Case Type: Other Ground Water
Record ID: RO0002499

CA FID UST:
Facility ID: 30000789
Regulated By: UTNKA
Regulated ID: Not reported
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 7146418494
Mail To: Not reported
Mailing Address: 12739 LAKEWOOD BLVD
Mailing Address 2: Not reported
Mailing City,St,Zip: HUNTINGTON BEACH 92647
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

SWEEPS UST:
Status: Active
Comp Number: 11537
Number: 9

QUALITY STATION #552 (Continued) **S101588999**

Board Of Equalization: Not reported
Referral Date: 09-30-92
Action Date: 09-15-92
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: Not reported
Swrcb Tank Id: 30-000-011537-000001
Actv Date: Not reported
Capacity: 12000
Tank Use: M.V. FUEL
Stg: P
Content: LEADED
Number Of Tanks: 3

Status: Active
Comp Number: 11537
Number: 9
Board Of Equalization: Not reported
Referral Date: 09-30-92
Action Date: 09-15-92
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: Not reported
Swrcb Tank Id: 30-000-011537-000002
Actv Date: Not reported
Capacity: 12000
Tank Use: M.V. FUEL
Stg: P
Content: REG UNLEADED
Number Of Tanks: Not reported

Status: Active
Comp Number: 11537
Number: 9
Board Of Equalization: Not reported
Referral Date: 09-30-92
Action Date: 09-15-92
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: Not reported
Swrcb Tank Id: 30-000-011537-000003
Actv Date: Not reported
Capacity: 12000
Tank Use: M.V. FUEL
Stg: P
Content: REG UNLEADED
Number Of Tanks: Not reported

ENF:
Region: 8
Facility Id: 228324
Agency Name: Not reported
Place Type: Facility
Place Subtype: Not reported
Facility Type: Industrial
Agency Type: Not reported
Of Agencies: Not reported

QUALITY STATION #552 (Continued) **S101588999**

Place Latitude:	Not reported
Place Longitude:	Not reported
SIC Code 1:	9999
SIC Desc 1:	Nonclassifiable Establishments
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Enf Action
Design Flow:	Not reported
Threat To Water Quality:	Not reported
Complexity:	Not reported
Pretreatment:	Not reported
Facility Waste Type:	Not reported
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	NPDESWW
Program Category1:	NPDESWW
Program Category2:	NPDESWW
# Of Programs:	1
WDID:	Not reported
Reg Measure Id:	137313
Reg Measure Type:	NPDES Permits
Region:	8
Order #:	96-018
Npdes# CA#:	CAG918001
Major-Minor:	Minor
Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	N
Application Fee Amt Received:	Not reported
Status:	Historical
Status Date:	02/06/2001
Effective Date:	10/11/1996
Expiration/Review Date:	10/01/2001
Termination Date:	02/01/2002
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	G
Fee Code:	Not reported
Direction/Voice:	Passive
Enforcement Id(EID):	240103
Region:	8

QUALITY STATION #552 (Continued) **S101588999**

Order / Resolution Number:	R8-2002-0021
Enforcement Action Type:	Admin Civil Liability
Effective Date:	01/25/2002
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	ACLC R8-2002-0021 for Haagen Company, LLC
Description:	MPC for three (3) MEK effluent violations from June thru Nov 2001. Total amount $9000; $6000 to CAA and $3000 to Orange County Coastkeeper for Kelp Reforestation Project (SEP).
Program:	NPDESWW
Latest Milestone Completion Date:	2002-06-03
# Of Programs1:	1
Total Assessment Amount:	6000
Initial Assessed Amount:	0
Liability $ Amount:	6000
Project $ Amount:	0
Liability $ Paid:	6000
Project $ Completed:	0
Total $ Paid/Completed Amount:	6000
Region:	8
Facility Id:	228324
Agency Name:	Not reported
Place Type:	Facility
Place Subtype:	Not reported
Facility Type:	Industrial
Agency Type:	Not reported
# Of Agencies:	Not reported
Place Latitude:	Not reported
Place Longitude:	Not reported
SIC Code 1:	9999
SIC Desc 1:	Nonclassifiable Establishments
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Enf Action
Design Flow:	Not reported
Threat To Water Quality:	Not reported
Complexity:	Not reported
Pretreatment:	Not reported
Facility Waste Type:	Not reported
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported

QUALITY STATION #552 (Continued) **S101588999**

Program:	NPDESWW
Program Category1:	NPDESWW
Program Category2:	NPDESWW
# Of Programs:	1
WDID:	Not reported
Reg Measure Id:	137313
Reg Measure Type:	NPDES Permits
Region:	8
Order #:	96-018
Npdes# CA#:	CAG918001
Major-Minor:	Minor
Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	N
Application Fee Amt Received:	Not reported
Status:	Historical
Status Date:	02/06/2001
Effective Date:	10/11/1996
Expiration/Review Date:	10/01/2001
Termination Date:	02/01/2002
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	G
Fee Code:	Not reported
Direction/Voice:	Passive
Enforcement Id(EID):	243163
Region:	8
Order / Resolution Number:	R8-2003-0087
Enforcement Action Type:	Admin Civil Liability
Effective Date:	07/22/2003
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	09/12/2003
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	MPC R8-2003-0087 for Haagen Company, LLC
Description:	MPC for two (2) MEK effluent violationson 12/12 & 12/26/01. Total amount $6,000.
Program:	NPDESWW
Latest Milestone Completion Date:	2003-09-12
# Of Programs1:	1
Total Assessment Amount:	6000
Initial Assessed Amount:	6000
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	6000

C22 **G & M OIL CO #34** **CA HIST CORTESE** **S101631350**
SW **15971 GOLDEN WEST BLVD** **CA LUST** **N/A**
< 1/8 **HUNTINGTON BEACH, CA 92647** **CA FID UST**
0.013 mi. **CA SWEEPS UST**
68 ft. **Site 7 of 16 in cluster C**

Relative:
Lower

Actual:
22 ft.

CORTESE:

Region:	CORTESE
Facility County Code:	30
Reg By:	LTNKA
Reg Id:	083002793T

LUST:

Region:	STATE
Global Id:	T0605901923
Latitude:	33.7302731
Longitude:	-118.0068606
Case Type:	LUST Cleanup Site
Status:	Open - Eligible for Closure
Status Date:	03/26/2013
Lead Agency:	ORANGE COUNTY LOP
Case Worker:	TE
Local Agency:	ORANGE COUNTY LOP
RB Case Number:	083002793T
LOC Case Number:	96UT007
File Location:	Local Agency
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Gasoline
Site History:	Please refer to recent Site Documents or Monitoring Reports in GeoTracker for site history. Orange County is not responsible for the accuracy of any professional interpretations provided in reports submitted by consultants for the responsible party.

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0605901923
Contact Type:	Regional Board Caseworker
Contact Name:	VALERIE JAHN-BULL
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500
City:	RIVERSIDE
Email:	vjahn-bull@waterboards.ca.gov
Phone Number:	9517824903

Global Id:	T0605901923
Contact Type:	Local Agency Caseworker
Contact Name:	TAMARA ESCOBEDO
Organization Name:	ORANGE COUNTY LOP
Address:	1241 EAST DYER ROAD SUITE 120
City:	SANTA ANA
Email:	tescobedo@ochca.com
Phone Number:	7144336251

Status History:

Global Id:	T0605901923
Status:	Open - Case Begin Date
Status Date:	01/23/1996

G & M OIL CO #34 (Continued) **S101631350**

Global Id: T0605901923
Status: Open - Eligible for Closure
Status Date: 03/26/2013

Global Id: T0605901923
Status: Open - Eligible for Closure
Status Date: 03/26/2013

Global Id: T0605901923
Status: Open - Remediation
Status Date: 10/28/1998

Global Id: T0605901923
Status: Open - Remediation
Status Date: 04/24/2000

Global Id: T0605901923
Status: Open - Remediation
Status Date: 03/22/2011

Global Id: T0605901923
Status: Open - Site Assessment
Status Date: 01/29/1996

Global Id: T0605901923
Status: Open - Verification Monitoring
Status Date: 06/27/2008

Global Id: T0605901923
Status: Open - Verification Monitoring
Status Date: 03/26/2013

Regulatory Activities:
Global Id: T0605901923
Action Type: ENFORCEMENT
Date: 01/29/2009
Action: Staff Letter

Global Id: T0605901923
Action Type: ENFORCEMENT
Date: 03/30/2012
Action: Technical Correspondence / Assistance / Other

Global Id: T0605901923
Action Type: ENFORCEMENT
Date: 03/30/2012
Action: Staff Letter

Global Id: T0605901923
Action Type: ENFORCEMENT
Date: 10/20/2011
Action: Staff Letter

Global Id: T0605901923
Action Type: ENFORCEMENT
Date: 03/22/2011
Action: Staff Letter

G & M OIL CO #34 (Continued) **S101631350**

Global Id: T0605901923
Action Type: ENFORCEMENT
Date: 11/24/2009
Action: Staff Letter

Global Id: T0605901923
Action Type: Other
Date: 01/01/1950
Action: Leak Reported

Global Id: T0605901923
Action Type: RESPONSE
Date: 11/21/2011
Action: Clean Up Fund - 5-Year Review Summary

Global Id: T0605901923
Action Type: REMEDIATION
Date: 01/01/1950
Action: In Situ Physical/Chemical Treatment (other than SVE)

Global Id: T0605901923
Action Type: ENFORCEMENT
Date: 12/30/2009
Action: Staff Letter

Global Id: T0605901923
Action Type: Other
Date: 01/01/1950
Action: Leak Began

Global Id: T0605901923
Action Type: ENFORCEMENT
Date: 07/02/2009
Action: Staff Letter

Global Id: T0605901923
Action Type: ENFORCEMENT
Date: 05/04/2012
Action: Technical Correspondence / Assistance / Other

Global Id: T0605901923
Action Type: ENFORCEMENT
Date: 07/10/2012
Action: Staff Letter

Global Id: T0605901923
Action Type: ENFORCEMENT
Date: 05/07/2013
Action: Clean Up Fund - Case Closure Review Summary Report (RSR)

Global Id: T0605901923
Action Type: ENFORCEMENT
Date: 05/07/2013
Action: State Water Board Closure Order

Global Id: T0605901923
Action Type: ENFORCEMENT

G & M OIL CO #34 (Continued) **S101631350**

Date: 07/18/2013
Action: State Water Board Closure Order

Global Id: T0605901923
Action Type: ENFORCEMENT
Date: 01/13/2012
Action: Staff Letter

Global Id: T0605901923
Action Type: ENFORCEMENT
Date: 11/23/2011
Action: Staff Letter

Global Id: T0605901923
Action Type: ENFORCEMENT
Date: 01/24/2000
Action: Staff Letter

Global Id: T0605901923
Action Type: ENFORCEMENT
Date: 02/03/2004
Action: Staff Letter

Global Id: T0605901923
Action Type: ENFORCEMENT
Date: 06/07/2004
Action: Staff Letter

Global Id: T0605901923
Action Type: ENFORCEMENT
Date: 10/17/2005
Action: Staff Letter

Global Id: T0605901923
Action Type: ENFORCEMENT
Date: 01/04/2007
Action: Staff Letter

Global Id: T0605901923
Action Type: ENFORCEMENT
Date: 05/13/2008
Action: Staff Letter

Global Id: T0605901923
Action Type: ENFORCEMENT
Date: 09/06/2007
Action: Staff Letter

Global Id: T0605901923
Action Type: ENFORCEMENT
Date: 08/20/2012
Action: Site Visit / Inspection / Sampling

Global Id: T0605901923
Action Type: ENFORCEMENT
Date: 03/18/2009
Action: Staff Letter

G & M OIL CO #34 (Continued) **S101631350**

Global Id: T0605901923
Action Type: ENFORCEMENT
Date: 05/07/2013
Action: Clean Up Fund - Letter to RP

Global Id: T0605901923
Action Type: ENFORCEMENT
Date: 02/10/2011
Action: Notification - Public Notice of ROD/RAP/CAP

Global Id: T0605901923
Action Type: REMEDIATION
Date: 01/01/1950
Action: In Situ Physical/Chemical Treatment (other than SVE)

Global Id: T0605901923
Action Type: RESPONSE
Date: 03/28/2013
Action: Well Destruction Workplan - Regulator Responded

Global Id: T0605901923
Action Type: ENFORCEMENT
Date: 12/19/2008
Action: Staff Letter

Global Id: T0605901923
Action Type: ENFORCEMENT
Date: 07/23/2013
Action: State Water Board Closure Order

Global Id: T0605901923
Action Type: ENFORCEMENT
Date: 09/28/2009
Action: Staff Letter

Global Id: T0605901923
Action Type: REMEDIATION
Date: 01/01/1950
Action: In Situ Physical/Chemical Treatment (other than SVE)

Global Id: T0605901923
Action Type: REMEDIATION
Date: 01/01/1950
Action: Excavation

Global Id: T0605901923
Action Type: RESPONSE
Date: 03/03/2010
Action: Clean Up Fund - 5-Year Review Summary

Global Id: T0605901923
Action Type: Other
Date: 01/01/1950
Action: Leak Discovery

Global Id: T0605901923
Action Type: ENFORCEMENT

G & M OIL CO #34 (Continued) **S101631350**

Date:	04/29/2009
Action:	Staff Letter
Global Id:	T0605901923
Action Type:	ENFORCEMENT
Date:	12/21/2010
Action:	Staff Letter
Region:	STATE
Global Id:	T0605900277
Latitude:	33.7302731
Longitude:	-118.0068606
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	07/11/1988
Lead Agency:	SANTA ANA RWQCB (REGION 8)
Case Worker:	CAB
Local Agency:	ORANGE COUNTY
RB Case Number:	083000351T
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0605900277
Contact Type:	Local Agency Caseworker
Contact Name:	ORANGE COUNTY
Organization Name:	ORANGE COUNTY
Address:	Not reported
City:	R9 UNKNOWN
Email:	Not reported
Phone Number:	Not reported
Global Id:	T0605900277
Contact Type:	Regional Board Caseworker
Contact Name:	CARL BERNHARDT
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500
City:	RIVERSIDE
Email:	cbernhardt@waterboards.ca.gov
Phone Number:	9517824495

Status History:

Global Id:	T0605900277
Status:	Completed - Case Closed
Status Date:	07/11/1988
Global Id:	T0605900277
Status:	Open - Case Begin Date
Status Date:	10/14/1985
Global Id:	T0605900277

G & M OIL CO #34 (Continued) **S101631350**

Status: Open - Site Assessment
Status Date: 08/10/1987

Regulatory Activities:
Global Id: T0605900277
Action Type: Other
Date: 01/01/1950
Action: Leak Discovery

Global Id: T0605900277
Action Type: Other
Date: 01/01/1950
Action: Leak Reported

ORANGE CO. LUST:
Region: ORANGE
Facility Id: 96UT007
Current Status: Remedial Action
Released Substance: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed: Not reported
Case Type: Other Ground Water
Record ID: RO0001136

LUST REG 8:
Region: 8
County: Orange
Regional Board: Santa Ana Region
Facility Status: Remedial action (cleanup) Underway
Case Number: 083002793T
Local Case Num: 96UT007
Case Type: Other ground water affected
Substance: Gasoline
Qty Leaked: 0
Abate Method: Not reported
Cross Street: Not reported
Enf Type: SEL
Funding: Not reported
How Discovered: Tank Closure
How Stopped: New Tank
Leak Cause: Unknown
Leak Source: Unknown
Global ID: T0605901923
How Stopped Date: 9/9/9999
Enter Date: Not reported
Review Date: Not reported
Prelim Assess: Not reported
Discover Date: 1/23/1996
Enforcement Date: Not reported
Close Date: Not reported
Workplan: 1/29/1996
Pollution Char: Not reported
Remed Plan: 10/28/1998
Remed Action: 4/24/2000
Monitoring: Not reported
Enter Date: Not reported

G & M OIL CO #34 (Continued) **S101631350**

GW Qualifies: =
Soil Qualifies: Not reported
Operator: Not reported
Facility Contact: Not reported
Interim: Not reported
Oversite Program: LUST
Latitude: 33.7302731
Longitude: -118.0068606
MTBE Date: 2/4/2002
Max MTBE GW: 72000
MTBE Concentration: 0
Max MTBE Soil: Not reported
MTBE Fuel: 1
MTBE Tested: MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class: *
Staff: VJJ
Staff Initials: AR
Lead Agency: Local Agency
Local Agency: 30000L
Hydr Basin #: Not reported
Beneficial: MUN
Priority: Not reported
Cleanup Fund Id: Not reported
Work Suspended: Not reported
Summary: Not reported

CA FID UST:
Facility ID: 30017559
Regulated By: UTNKA
Regulated ID: Not reported
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 7148939538
Mail To: Not reported
Mailing Address: 15402 ELECTRONIC LN O J OT
Mailing Address 2: Not reported
Mailing City,St,Zip: HUNTINGTON BEACH 92647
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

SWEEPS UST:
Status: Active
Comp Number: 6712
Number: 9
Board Of Equalization: 44-016523
Referral Date: 09-30-92
Action Date: 09-15-92
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: Not reported
Swrcb Tank Id: 30-000-006712-000001

G & M OIL CO #34 (Continued) **S101631350**

Actv Date:	Not reported
Capacity:	5000
Tank Use:	M.V. FUEL
Stg:	P
Content:	LEADED
Number Of Tanks:	6
Status:	Active
Comp Number:	6712
Number:	9
Board Of Equalization:	44-016523
Referral Date:	09-30-92
Action Date:	09-15-92
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	Not reported
Swrcb Tank Id:	30-000-006712-000002
Actv Date:	Not reported
Capacity:	8000
Tank Use:	M.V. FUEL
Stg:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported
Status:	Active
Comp Number:	6712
Number:	9
Board Of Equalization:	44-016523
Referral Date:	09-30-92
Action Date:	09-15-92
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	Not reported
Swrcb Tank Id:	30-000-006712-000003
Actv Date:	Not reported
Capacity:	5000
Tank Use:	M.V. FUEL
Stg:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported
Status:	Active
Comp Number:	6712
Number:	9
Board Of Equalization:	44-016523
Referral Date:	09-30-92
Action Date:	09-15-92
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	Not reported
Swrcb Tank Id:	30-000-006712-000004
Actv Date:	Not reported
Capacity:	8000
Tank Use:	M.V. FUEL
Stg:	P
Content:	DIESEL
Number Of Tanks:	Not reported

G & M OIL CO #34 (Continued) **S101631350**

Status:	Active
Comp Number:	6712
Number:	9
Board Of Equalization:	44-016523
Referral Date:	09-30-92
Action Date:	09-15-92
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	Not reported
Swrcb Tank Id:	30-000-006712-000005
Actv Date:	Not reported
Capacity:	250
Tank Use:	PETROLEUM
Stg:	P
Content:	Not reported
Number Of Tanks:	Not reported

Status:	Active
Comp Number:	6712
Number:	9
Board Of Equalization:	44-016523
Referral Date:	09-30-92
Action Date:	09-15-92
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	Not reported
Swrcb Tank Id:	30-000-006712-000006
Actv Date:	Not reported
Capacity:	10000
Tank Use:	M.V. FUEL
Stg:	P
Content:	DIESEL
Number Of Tanks:	Not reported

C23 **G & M OIL #34** **CA UST** **U003433017**
SW **15971 GOLDENWEST ST** **N/A**
< 1/8 **HUNTINGTON BEACH, CA 92647**
0.013 mi.
68 ft. **Site 8 of 16 in cluster C**

Relative:
Lower

Actual:
22 ft.

UST:

Facility ID:	6712
Latitude:	33.73047
Longitude:	-118.00685

ORANGE CO. UST:

Facility ID:	FA0024564

C24
SW
< 1/8
0.013 mi.
68 ft.

SHELL OIL COMPANY
15971 GOLDENWEST ST
HUNTINGTON BEACH, CA 92646

Site 9 of 16 in cluster C

CA HIST UST **U001577237**
N/A

Relative:
Lower

Actual:
22 ft.

HIST UST:

Region:	STATE
Facility ID:	00000002268
Facility Type:	Gas Station
Other Type:	Not reported
Total Tanks:	0005
Contact Name:	ZAREH DERKRIKORIAN
Telephone:	7148915739
Owner Name:	SHELL OIL COMPANY
Owner Address:	P.O. BOX 4848
Owner City,St,Zip:	ANAHEIM, CA 92803

Tank Num:	001
Container Num:	1
Year Installed:	1963
Tank Capacity:	00008000
Tank Used for:	PRODUCT
Type of Fuel:	PREMIUM
Tank Construction:	1/4 inches
Leak Detection:	Stock Inventor, 10

Tank Num:	002
Container Num:	2
Year Installed:	1963
Tank Capacity:	00005000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Tank Construction:	1/4 inches
Leak Detection:	Stock Inventor, 10

Tank Num:	003
Container Num:	3
Year Installed:	1963
Tank Capacity:	00005000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Tank Construction:	1/4 inches
Leak Detection:	Stock Inventor, 10

Tank Num:	004
Container Num:	4
Year Installed:	1970
Tank Capacity:	00008000
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Tank Construction:	1/4 inches
Leak Detection:	Stock Inventor, 10

Tank Num:	005
Container Num:	5
Year Installed:	1963
Tank Capacity:	00000550
Tank Used for:	WASTE

SHELL OIL COMPANY (Continued) **U001577237**

Type of Fuel: WASTE OIL
Tank Construction: 12 gauge
Leak Detection: Stock Inventor, 10

C25 **SHELL #15971** **CA LUST** **S104791736**
SW **15971 GOLDEN WEST ST** **N/A**
< 1/8 **HUNTINGTON BEACH, CA 92647**
0.013 mi.
68 ft. **Site 10 of 16 in cluster C**

Relative:
Lower

Actual:
22 ft.

LUST REG 8:

Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	083000351T
Local Case Num:	Not reported
Case Type:	Other ground water affected
Substance:	Unleaded Gasoline
Qty Leaked:	9
Abate Method:	Not reported
Cross Street:	WARNER
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Inventory Control
How Stopped:	Not reported
Leak Cause:	Not reported
Leak Source:	Piping
Global ID:	T0605900277
How Stopped Date:	Not reported
Enter Date:	12/31/1986
Review Date:	Not reported
Prelim Assess:	Not reported
Discover Date:	10/14/1985
Enforcement Date:	Not reported
Close Date:	7/11/1988
Workplan:	Not reported
Pollution Char:	8/10/1987
Remed Plan:	Not reported
Remed Action:	Not reported
Monitoring:	Not reported
Enter Date:	12/31/1986
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.7302731
Longitude:	-118.0068606
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
MTBE Class:	*
Staff:	CAB

SHELL #15971 (Continued) **S104791736**

Staff Initials: Not reported
Lead Agency: Regional Board
Local Agency: 30000
Hydr Basin #: COASTAL PLAIN OF ORA
Beneficial: Not reported
Priority: Not reported
Cleanup Fund Id: Not reported
Work Suspended: Not reported
Summary: Not reported

C26 **CALIFORNIA BEACH CLEANERS** **RCRA-SQG** **1000819124**
SW **15951 GOLDENWEST ST** **FINDS** **CAD983650920**
< 1/8 **HUNTINGTON BEACH, CA**
0.013 mi.
69 ft. **Site 11 of 16 in cluster C**

Relative:
Lower

Actual:
22 ft.

RCRA-SQG:
Date form received by agency: 10/22/1992
Facility name: CALIFORNIA BEACH CLEANERS
Facility address: 15951 GOLDENWEST ST
HUNTINGTON BEACH, CA 92648
EPA ID: CAD983650920
Mailing address: GOLDENWEST ST
HUNTINGTON BEACH, CA 92648
Contact: RAHER KHALAE
Contact address: 15951 GOLDENWEST ST
HUNTINGTON BEACH, CA 92648
Contact country: US
Contact telephone: (714) 379-0461
Contact email: Not reported
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: RAHER KHALAE
Owner/operator address: 15951 GOLDENWEST ST
HUNTINGTON BEACH, CA 93648
Owner/operator country: Not reported
Owner/operator telephone: (714) 379-0461
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No

CALIFORNIA BEACH CLEANERS (Continued) **1000819124**

Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110002886342

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

E27 **CVS PHARMACY NO 8885** **RCRA-LQG** **1015753091**
NW **15520 GOLDENWEST ST** **CAR000234245**
< 1/8 **HUNTINGTON, CA 92647**
0.013 mi.
71 ft. **Site 1 of 7 in cluster E**

Relative:
Higher

Actual:
23 ft.

RCRA-LQG:
Date form received by agency: 01/03/2013
Facility name: CVS PHARMACY NO 8885
Facility address: 15520 GOLDENWEST ST
HUNTINGTON, CA 92647
EPA ID: CAR000234245
Mailing address: ONE CVS DR
WOONSOCKET, RI 02895
Contact: WENDY L BRANT
Contact address: ONE CVS DR
WOONSOCKET, RI 02895
Contact country: US
Contact telephone: 401-765-1500
Contact email: WENDY.BRANT@CVSCAREMARK.COM
EPA Region: 09
Classification: Large Quantity Generator
Description: Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

CVS PHARMACY NO 8885 (Continued) **1015753091**

Owner/Operator Summary:

Owner/operator name:	COAST COMMUNITY COLLEGE DIST
Owner/operator address:	1370 ADAMS AVE
	COSTA MESA, CA 92626
Owner/operator country:	US
Owner/operator telephone:	714-438-4690
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	02/19/2008
Owner/Op end date:	Not reported

Owner/operator name:	GARFIELD BEACH CVS LLC
Owner/operator address:	Not reported
	Not reported
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	01/17/2010
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code:	D002
Waste name:	A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

CVS PHARMACY NO 8885 (Continued) **1015753091**

Waste code: P001
Waste name: 2H-1-BENZOPYRAN-2-ONE, 4-HYDROXY-3-(3-OXO-1-PHENYLBUTYL)-, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3%

Waste code: P042
Waste name: 1,2-BENZENEDIOL, 4-[1-HYDROXY-2-(METHYLAMINO)ETHYL]-, (R)-

Waste code: P075
Waste name: NICOTINE, & SALTS

Waste code: P081
Waste name: NITROGLYCERINE (R)

Violation Status: No violations found

E28
NNW
< 1/8
0.027 mi.
144 ft.

JOHN STREETS UNION 76
15482 GOLDEN WEST
WESTMINSTER, CA 92683

Site 2 of 7 in cluster E

CA HIST CORTESE **1000306243**
CA LUST **N/A**
CA FID UST
CA SWEEPS UST

Relative:
Higher

Actual:
24 ft.

CORTESE:
Region: CORTESE
Facility County Code: 30
Reg By: LTNKA
Reg Id: 083000100T

Region: CORTESE
Facility County Code: 30
Reg By: LTNKA
Reg Id: 083002966T

LUST REG 8:
Region: 8
County: Orange
Regional Board: Santa Ana Region
Facility Status: Remediation Plan
Case Number: 083000100T
Local Case Num: 88UT139
Case Type: Other ground water affected
Substance: Gasoline
Qty Leaked: 0
Abate Method: Not reported
Cross Street: Not reported
Enf Type: Cleanup and Abatement Orders
Funding: Not reported
How Discovered: OM
How Stopped: Other Means
Leak Cause: Unknown
Leak Source: Unknown
Global ID: T0605900077
How Stopped Date: 9/9/9999
Enter Date: Not reported
Review Date: Not reported
Prelim Assess: Not reported
Discover Date: 1/19/1988
Enforcement Date: Not reported
Close Date: Not reported

JOHN STREETS UNION 76 (Continued) **1000306243**

Workplan:	Not reported
Pollution Char:	Not reported
Remed Plan:	3/11/2003
Remed Action:	Not reported
Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	=
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.7385848
Longitude:	-117.989178
MTBE Date:	11/16/2001
Max MTBE GW:	20
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class:	*
Staff:	TME
Staff Initials:	SK
Lead Agency:	Local Agency
Local Agency:	30000L
Hydr Basin #:	Not reported
Beneficial:	MUN
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Remedial action (cleanup) Underway
Case Number:	083002966T
Local Case Num:	97UT006
Case Type:	Other ground water affected
Substance:	12035,800661
Qty Leaked:	0
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	SEL
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	New Tank
Leak Cause:	Unknown
Leak Source:	Unknown
Global ID:	T0605902030
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Review Date:	Not reported
Prelim Assess:	Not reported
Discover Date:	2/25/1997
Enforcement Date:	Not reported
Close Date:	Not reported

JOHN STREETS UNION 76 (Continued) **1000306243**

Workplan: Not reported
Pollution Char: Not reported
Remed Plan: Not reported
Remed Action: 6/15/2002
Monitoring: Not reported
Enter Date: Not reported
GW Qualifies: =
Soil Qualifies: Not reported
Operator: Not reported
Facility Contact: Not reported
Interim: Not reported
Oversite Program: LUST
Latitude: 33.7446686
Longitude: -118.0021864
MTBE Date: 4/23/2002
Max MTBE GW: 840
MTBE Concentration: 0
Max MTBE Soil: Not reported
MTBE Fuel: 0
MTBE Tested: MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class: *
Staff: NOM
Staff Initials: SK
Lead Agency: Local Agency
Local Agency: 30000L
Hydr Basin #: Not reported
Beneficial: MUN
Priority: Not reported
Cleanup Fund Id: Not reported
Work Suspended: Not reported
Summary: Not reported

CA FID UST:
Facility ID: 30017430
Regulated By: UTNKA
Regulated ID: Not reported
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 2136860941
Mail To: Not reported
Mailing Address: 911 WILSHIRE BLVD STE 10
Mailing Address 2: Not reported
Mailing City,St,Zip: WESTMINSTER 92683
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

SWEEPS UST:
Status: Active
Comp Number: 2297
Number: 9
Board Of Equalization: 44-001057

JOHN STREETS UNION 76 (Continued) **1000306243**

Referral Date:	09-30-92
Action Date:	09-15-92
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	Not reported
Swrcb Tank Id:	30-000-002297-000001
Actv Date:	Not reported
Capacity:	280
Tank Use:	PETROLEUM
Stg:	P
Content:	Not reported
Number Of Tanks:	3

Status:	Active
Comp Number:	2297
Number:	9
Board Of Equalization:	44-001057
Referral Date:	09-30-92
Action Date:	09-15-92
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	Not reported
Swrcb Tank Id:	30-000-002297-000004
Actv Date:	Not reported
Capacity:	10000
Tank Use:	M.V. FUEL
Stg:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported

Status:	Active
Comp Number:	2297
Number:	9
Board Of Equalization:	44-001057
Referral Date:	09-30-92
Action Date:	09-15-92
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	Not reported
Swrcb Tank Id:	30-000-002297-000005
Actv Date:	Not reported
Capacity:	10000
Tank Use:	M.V. FUEL
Stg:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported

E29 **UNOCAL COP #5888** **CA LUST** **S108203367**
NNW **15482 GOLDENWEST** **N/A**
< 1/8 **WESTMINSTER, CA 92683**
0.027 mi.
144 ft. **Site 3 of 7 in cluster E**

Relative:
Higher

Actual:
24 ft.

LUST:

Region:	STATE
Global Id:	T0605902030
Latitude:	33.737603
Longitude:	-118.006531

UNOCAL COP #5888 (Continued) **S108203367**

Case Type:	LUST Cleanup Site
Status:	Open - Remediation
Status Date:	06/15/2002
Lead Agency:	ORANGE COUNTY LOP
Case Worker:	JW
Local Agency:	ORANGE COUNTY LOP
RB Case Number:	083002966T
LOC Case Number:	97UT006
File Location:	Local Agency
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Waste Oil / Motor / Hydraulic / Lubricating, Gasoline
Site History:	Please refer to recent Site Documents or Monitoring Reports in GeoTracker for site history. Orange County is not responsible for the accuracy of any professional interpretations provided in reports submitted by consultants for the responsible party.

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0605902030
Contact Type:	Regional Board Caseworker
Contact Name:	NANCY OLSON-MARTIN
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500
City:	RIVERSIDE
Email:	nolson-martin@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0605902030
Contact Type:	Local Agency Caseworker
Contact Name:	JULIE WOZENCRAFT
Organization Name:	ORANGE COUNTY LOP
Address:	1241 EAST DYER ROAD SUITE 120
City:	SANTA ANA
Email:	jwozencraft@ochca.com
Phone Number:	7144336252

Status History:

Global Id:	T0605902030
Status:	Open - Case Begin Date
Status Date:	02/25/1997

Global Id:	T0605902030
Status:	Open - Remediation
Status Date:	06/15/2002

Regulatory Activities:

Global Id:	T0605902030
Action Type:	Other
Date:	01/01/1950
Action:	Leak Reported

Global Id:	T0605902030
Action Type:	REMEDIATION
Date:	01/01/1950
Action:	Soil Vapor Extraction (SVE)

UNOCAL COP #5888 (Continued) **S108203367**

Global Id: T0605902030
Action Type: ENFORCEMENT
Date: 05/16/2011
Action: File review

Global Id: T0605902030
Action Type: RESPONSE
Date: 08/18/2003
Action: Other Report / Document

Global Id: T0605902030
Action Type: RESPONSE
Date: 07/15/2003
Action: Other Report / Document

Global Id: T0605902030
Action Type: RESPONSE
Date: 07/15/2003
Action: Soil and Water Investigation Workplan

Global Id: T0605902030
Action Type: RESPONSE
Date: 11/14/2003
Action: Soil and Water Investigation Report

Global Id: T0605902030
Action Type: RESPONSE
Date: 10/30/2003
Action: Other Report / Document

Global Id: T0605902030
Action Type: RESPONSE
Date: 03/04/2005
Action: Risk Assessment Report

Global Id: T0605902030
Action Type: RESPONSE
Date: 05/25/2005
Action: Soil and Water Investigation Report

Global Id: T0605902030
Action Type: ENFORCEMENT
Date: 06/13/2003
Action: Staff Letter - #1

Global Id: T0605902030
Action Type: ENFORCEMENT
Date: 06/13/2003
Action: Staff Letter - #2

Global Id: T0605902030
Action Type: ENFORCEMENT
Date: 12/15/2004
Action: Staff Letter

Global Id: T0605902030
Action Type: ENFORCEMENT

UNOCAL COP #5888 (Continued) **S108203367**

Date: 07/28/2003
Action: Staff Letter

Global Id: T0605902030
Action Type: ENFORCEMENT
Date: 04/22/2005
Action: Warning Letter

Global Id: T0605902030
Action Type: ENFORCEMENT
Date: 07/31/2003
Action: Staff Letter

Global Id: T0605902030
Action Type: ENFORCEMENT
Date: 10/03/2003
Action: Staff Letter

Global Id: T0605902030
Action Type: ENFORCEMENT
Date: 11/19/2003
Action: Staff Letter

Global Id: T0605902030
Action Type: ENFORCEMENT
Date: 04/30/2004
Action: Staff Letter

Global Id: T0605902030
Action Type: ENFORCEMENT
Date: 10/02/2003
Action: Staff Letter

Global Id: T0605902030
Action Type: ENFORCEMENT
Date: 01/27/2004
Action: Staff Letter

Global Id: T0605902030
Action Type: RESPONSE
Date: 12/20/2012
Action: Soil and Water Investigation Workplan - Regulator Responded

Global Id: T0605902030
Action Type: ENFORCEMENT
Date: 07/06/2009
Action: Staff Letter

Global Id: T0605902030
Action Type: Other
Date: 01/01/1950
Action: Leak Discovery

Global Id: T0605902030
Action Type: ENFORCEMENT
Date: 07/08/2008
Action: Staff Letter

UNOCAL COP #5888 (Continued) **S108203367**

Global Id: T0605902030
Action Type: ENFORCEMENT
Date: 09/23/2010
Action: Staff Letter

ORANGE CO. LUST:
Region: ORANGE
Facility Id: 97UT006
Current Status: Remedial Action
Released Substance: Waste oil/Used oil
Date Closed: Not reported
Case Type: Other Ground Water
Record ID: RO0000958

Region: ORANGE
Facility Id: 97UT006
Current Status: Not reported
Released Substance: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed: Not reported
Case Type: Not reported
Record ID: RO0000958

E30 **JOHN STREETS UNION 76** **CA UST** **U003913486**
NNW **15482 GOLDENWEST ST** **N/A**
< 1/8 **WESTMINSTER, CA 92683**
0.027 mi.
144 ft. **Site 4 of 7 in cluster E**

Relative:
Higher

Actual:
24 ft.

UST:
Facility ID: 2297
Latitude: 33.73773
Longitude: -118.00686

ORANGE CO. UST:
Facility ID: FA0060447

E31 **SERVICE STATION 5888** **CA HIST UST** **U001577976**
NNW **15482 GOLDENWEST ST** **N/A**
< 1/8 **WESTMINSTER, CA 92683**
0.027 mi.
144 ft. **Site 5 of 7 in cluster E**

Relative:
Higher

Actual:
24 ft.

HIST UST:
Region: STATE
Facility ID: 00000018025
Facility Type: Gas Station
Other Type: Not reported
Total Tanks: 0003
Contact Name: JOHN PATRICK STREET
Telephone: 8188936113
Owner Name: UNION OIL COMPANY OF CALIFORNI
Owner Address: 3701 WILSHIRE BOULEVARD-SUITE
Owner City,St,Zip: LOS ANGELES, CA 90010

SERVICE STATION 5888 (Continued) **U001577976**

Tank Num: 001
Container Num: 5888-4
Year Installed: 1966
Tank Capacity: 00000280
Tank Used for: WASTE
Type of Fuel: WASTE OIL
Tank Construction: Not reported
Leak Detection: Stock Inventor, Pressure Test

Tank Num: 002
Container Num: 5888-2
Year Installed: 1966
Tank Capacity: 00009940
Tank Used for: PRODUCT
Type of Fuel: PREMIUM
Tank Construction: Not reported
Leak Detection: Stock Inventor, Pressure Test

Tank Num: 003
Container Num: 5888-1
Year Installed: 1966
Tank Capacity: 00009940
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Tank Construction: Not reported
Leak Detection: Stock Inventor, Pressure Test

E32 **UNION OIL SERVICE STATION 5888** **CA HIST UST** **1000166825**
NNW **15482 GOLDENWEST ST** **N/A**
< 1/8 **WESTMINSTER, CA 92683**
0.027 mi.
144 ft. **Site 6 of 7 in cluster E**

Relative:
Higher

Actual:
24 ft.

HIST UST:
Region: STATE
Facility ID: 00000056249
Facility Type: Gas Station
Other Type: Not reported
Total Tanks: 0001
Contact Name: JOHN PATRICK STREET
Telephone: 8188936113
Owner Name: UNION OIL COMPANY OF CALIFRONI
Owner Address: 3701 WILSHIRE BOULEVARD-SUITE
Owner City,St,Zip: LOS ANGELES, CA 90010

Tank Num: 001
Container Num: 1
Year Installed: Not reported
Tank Capacity: 00000063
Tank Used for: WASTE
Type of Fuel: WASTE OIL
Tank Construction: Not reported
Leak Detection: None

E33
NNW
< 1/8
0.027 mi.
144 ft.

15482 GOLDENWEST ST
WESTMINSTER, CA 92683

Site 7 of 7 in cluster E

EDR US Hist Auto Stat **1015246189**
N/A

Relative:
Higher

Actual:
24 ft.

EDR Historical Auto Stations:

Name:	D & D UNION 76
Year:	2001
Address:	15482 GOLDENWEST ST
Name:	UNION 76
Year:	2002
Address:	15482 GOLDENWEST ST
Name:	D & D UNION 76
Year:	2003
Address:	15482 GOLDENWEST ST
Name:	D & D UNION 76
Year:	2004
Address:	15482 GOLDENWEST ST
Name:	D & D UNION 76
Year:	2005
Address:	15482 GOLDENWEST ST
Name:	GOLDENWEST UNION 76
Year:	2008
Address:	15482 GOLDENWEST ST

C34
SW
< 1/8
0.048 mi.
253 ft.

TEXACO SERVICE STATION
6962 EDINGER
HUNTINGTON BEACH, CA

Site 12 of 16 in cluster C

RCRA-SQG **1004676579**
FINDS **CAR000087056**

Relative:
Lower

Actual:
21 ft.

RCRA-SQG:

Date form received by agency:	11/22/2000
Facility name:	TEXACO SERVICE STATION
Facility address:	6962 EDINGER SAP 121495 HUNTINGTON BEACH, CA 92647
EPA ID:	CAR000087056
Mailing address:	P O BOX 2099 HOUSTON, TX 77252
Contact:	SONDRA BIENVENU
Contact address:	P O BOX 2099 TSP 1501 HOUSTON, TX 77252
Contact country:	US
Contact telephone:	(713) 241-5036
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

TEXACO SERVICE STATION (Continued) **1004676579**

Owner/Operator Summary:
Owner/operator name: EQUILON ENTERPRISES
Owner/operator address: P O BOX 2099
HOUSTON, TX 77252
Owner/operator country: Not reported
Owner/operator telephone: (713) 241-5036
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D000
Waste name: Not Defined

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D018
Waste name: BENZENE

Violation Status: No violations found

FINDS:

Registry ID: 110012207478

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and

TEXACO SERVICE STATION (Continued) **1004676579**

corrective action activities required under RCRA.

C35 **TEXACO** **CA HIST CORTESE** **S101629965**
SW **6962 EDINGER** **CA LUST** **N/A**
< 1/8 **HUNTINGTON BEACH, CA 92647** **CA FID UST**
0.048 mi. **CA SWEEPS UST**
253 ft. **Site 13 of 16 in cluster C**

Relative:
Lower

Actual:
21 ft.

CORTESE:

Region:	CORTESE
Facility County Code:	30
Reg By:	LTNKA
Reg Id:	083000874T

LUST:

Region:	STATE
Global Id:	T0605900690
Latitude:	33.7298091
Longitude:	-118.0073256
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	06/29/2012
Lead Agency:	ORANGE COUNTY LOP
Case Worker:	GH
Local Agency:	ORANGE COUNTY LOP
RB Case Number:	083000874T
LOC Case Number:	88UT058
File Location:	Local Agency
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Gasoline
Site History:	Please refer to recent Site Documents or Monitoring Reports in GeoTracker for site history. Orange County is not responsible for the accuracy of any professional interpretations provided in reports submitted by consultants for the responsible party.

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0605900690
Contact Type:	Regional Board Caseworker
Contact Name:	TOM E. MBEKE-EKANEM
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500
City:	RIVERSIDE
Email:	tmbeke-ekanem@waterboards.ca.gov
Phone Number:	9513202007

Global Id:	T0605900690
Contact Type:	Local Agency Caseworker
Contact Name:	GENIECE HIGGINS
Organization Name:	ORANGE COUNTY LOP
Address:	1241 EAST DYER ROAD SUITE 120
City:	SANTA ANA
Email:	ghiggins@ochca.com
Phone Number:	7144336260

TEXACO (Continued) **S101629965**

Status History:

Global Id:	T0605900690
Status:	Completed - Case Closed
Status Date:	06/29/2012
Global Id:	T0605900690
Status:	Open - Case Begin Date
Status Date:	03/22/1988
Global Id:	T0605900690
Status:	Open - Remediation
Status Date:	03/22/1988
Global Id:	T0605900690
Status:	Open - Remediation
Status Date:	04/22/2009
Global Id:	T0605900690
Status:	Open - Verification Monitoring
Status Date:	05/01/2003
Global Id:	T0605900690
Status:	Open - Verification Monitoring
Status Date:	08/02/2010

Regulatory Activities:

Global Id:	T0605900690
Action Type:	ENFORCEMENT
Date:	12/30/2009
Action:	Staff Letter
Global Id:	T0605900690
Action Type:	ENFORCEMENT
Date:	03/27/2012
Action:	Staff Letter
Global Id:	T0605900690
Action Type:	RESPONSE
Date:	04/18/2012
Action:	Clean Up Fund - 5-Year Review Summary
Global Id:	T0605900690
Action Type:	RESPONSE
Date:	04/17/2009
Action:	Monitoring Report - Quarterly
Global Id:	T0605900690
Action Type:	RESPONSE
Date:	04/30/1993
Action:	Monitoring Report - Quarterly
Global Id:	T0605900690
Action Type:	RESPONSE
Date:	04/17/2009
Action:	Monitoring Report - Quarterly

TEXACO (Continued) **S101629965**

Global Id: T0605900690
Action Type: RESPONSE
Date: 04/17/2009
Action: Monitoring Report - Quarterly

Global Id: T0605900690
Action Type: ENFORCEMENT
Date: 11/24/2008
Action: Staff Letter

Global Id: T0605900690
Action Type: ENFORCEMENT
Date: 06/10/2010
Action: Staff Letter

Global Id: T0605900690
Action Type: Other
Date: 01/01/1950
Action: Leak Began

Global Id: T0605900690
Action Type: RESPONSE
Date: 02/24/1992
Action: CAP/RAP - Other Report

Global Id: T0605900690
Action Type: RESPONSE
Date: 01/31/1994
Action: Monitoring Report - Quarterly

Global Id: T0605900690
Action Type: RESPONSE
Date: 05/18/1994
Action: Monitoring Report - Quarterly

Global Id: T0605900690
Action Type: ENFORCEMENT
Date: 09/23/2011
Action: Staff Letter

Global Id: T0605900690
Action Type: ENFORCEMENT
Date: 12/23/2004
Action: Staff Letter

Global Id: T0605900690
Action Type: ENFORCEMENT
Date: 10/03/2002
Action: Warning Letter

Global Id: T0605900690
Action Type: ENFORCEMENT
Date: 03/30/1992
Action: Staff Letter

Global Id: T0605900690
Action Type: ENFORCEMENT

TEXACO (Continued) **S101629965**

Date: 09/24/1991
Action: Warning Letter

Global Id: T0605900690
Action Type: ENFORCEMENT
Date: 07/23/2003
Action: Staff Letter

Global Id: T0605900690
Action Type: ENFORCEMENT
Date: 08/13/2001
Action: Warning Letter

Global Id: T0605900690
Action Type: ENFORCEMENT
Date: 03/29/1988
Action: Staff Letter

Global Id: T0605900690
Action Type: ENFORCEMENT
Date: 12/28/2005
Action: * Historical Enforcement

Global Id: T0605900690
Action Type: ENFORCEMENT
Date: 10/27/1989
Action: Staff Letter

Global Id: T0605900690
Action Type: ENFORCEMENT
Date: 01/17/2007
Action: Staff Letter

Global Id: T0605900690
Action Type: ENFORCEMENT
Date: 10/01/2007
Action: Staff Letter

Global Id: T0605900690
Action Type: ENFORCEMENT
Date: 02/21/1992
Action: Notice of Violation

Global Id: T0605900690
Action Type: ENFORCEMENT
Date: 07/23/2004
Action: Staff Letter

Global Id: T0605900690
Action Type: ENFORCEMENT
Date: 01/03/1991
Action: Warning Letter

Global Id: T0605900690
Action Type: ENFORCEMENT
Date: 04/11/1991
Action: Warning Letter

TEXACO (Continued) **S101629965**

Global Id: T0605900690
Action Type: ENFORCEMENT
Date: 04/22/1993
Action: Warning Letter

Global Id: T0605900690
Action Type: ENFORCEMENT
Date: 04/28/1995
Action: Warning Letter

Global Id: T0605900690
Action Type: ENFORCEMENT
Date: 04/02/2002
Action: Warning Letter

Global Id: T0605900690
Action Type: ENFORCEMENT
Date: 10/27/1989
Action: Warning Letter

Global Id: T0605900690
Action Type: ENFORCEMENT
Date: 12/11/2006
Action: Staff Letter

Global Id: T0605900690
Action Type: ENFORCEMENT
Date: 06/19/2000
Action: Staff Letter

Global Id: T0605900690
Action Type: ENFORCEMENT
Date: 06/13/2001
Action: Staff Letter

Global Id: T0605900690
Action Type: ENFORCEMENT
Date: 05/23/2007
Action: Staff Letter

Global Id: T0605900690
Action Type: ENFORCEMENT
Date: 03/06/2008
Action: Staff Letter

Global Id: T0605900690
Action Type: ENFORCEMENT
Date: 02/23/2006
Action: Staff Letter

Global Id: T0605900690
Action Type: ENFORCEMENT
Date: 06/12/2006
Action: Staff Letter

Global Id: T0605900690
Action Type: ENFORCEMENT

TEXACO (Continued) **S101629965**

Date: 09/05/2006
Action: Staff Letter

Global Id: T0605900690
Action Type: ENFORCEMENT
Date: 10/20/1995
Action: Warning Letter

Global Id: T0605900690
Action Type: ENFORCEMENT
Date: 02/18/2003
Action: Staff Letter

Global Id: T0605900690
Action Type: ENFORCEMENT
Date: 03/08/2006
Action: Staff Letter

Global Id: T0605900690
Action Type: ENFORCEMENT
Date: 06/29/2012
Action: Closure/No Further Action Letter

Global Id: T0605900690
Action Type: ENFORCEMENT
Date: 05/01/2012
Action: Notification - Preclosure

Global Id: T0605900690
Action Type: RESPONSE
Date: 04/17/2009
Action: Monitoring Report - Quarterly

Global Id: T0605900690
Action Type: RESPONSE
Date: 04/17/2009
Action: Monitoring Report - Quarterly

Global Id: T0605900690
Action Type: RESPONSE
Date: 04/17/2009
Action: Monitoring Report - Quarterly

Global Id: T0605900690
Action Type: RESPONSE
Date: 04/17/2009
Action: Monitoring Report - Quarterly

Global Id: T0605900690
Action Type: RESPONSE
Date: 11/16/2001
Action: Conceptual Site Model

Global Id: T0605900690
Action Type: REMEDIATION
Date: 01/01/1950
Action: Excavation

TEXACO (Continued) **S101629965**

Global Id: T0605900690
Action Type: RESPONSE
Date: 03/27/2002
Action: Monitoring Report - Quarterly

Global Id: T0605900690
Action Type: RESPONSE
Date: 04/17/2009
Action: Tank Removal Report / UST Sampling Report

Global Id: T0605900690
Action Type: RESPONSE
Date: 05/01/1992
Action: Well Installation Report

Global Id: T0605900690
Action Type: Other
Date: 01/01/1950
Action: Leak Discovery

Global Id: T0605900690
Action Type: ENFORCEMENT
Date: 03/27/2012
Action: Notification - Fee Title Owners Notice

Global Id: T0605900690
Action Type: ENFORCEMENT
Date: 09/28/2009
Action: Staff Letter

Global Id: T0605900690
Action Type: REMEDIATION
Date: 01/01/1950
Action: Free Product Removal

Global Id: T0605900690
Action Type: REMEDIATION
Date: 01/01/1950
Action: Pump & Treat (P&T) Groundwater

Global Id: T0605900690
Action Type: REMEDIATION
Date: 01/01/1950
Action: Excavation

Global Id: T0605900690
Action Type: REMEDIATION
Date: 01/01/1950
Action: Other (Use Description Field)

Global Id: T0605900690
Action Type: ENFORCEMENT
Date: 04/23/2009
Action: Staff Letter

Global Id: T0605900690
Action Type: RESPONSE

TEXACO (Continued) **S101629965**

Date: 04/17/2009
Action: Monitoring Report - Quarterly

Global Id: T0605900690
Action Type: RESPONSE
Date: 07/28/1999
Action: Other Workplan

Global Id: T0605900690
Action Type: RESPONSE
Date: 12/01/1991
Action: Corrective Action Plan / Remedial Action Plan

Global Id: T0605900690
Action Type: RESPONSE
Date: 01/18/2006
Action: Soil and Water Investigation Workplan

Global Id: T0605900690
Action Type: RESPONSE
Date: 06/04/1991
Action: Soil and Water Investigation Report

Global Id: T0605900690
Action Type: RESPONSE
Date: 04/07/2009
Action: CAP/RAP - Other Report

Global Id: T0605900690
Action Type: RESPONSE
Date: 01/11/1996
Action: Monitoring Report - Quarterly

Global Id: T0605900690
Action Type: RESPONSE
Date: 04/17/2009
Action: Monitoring Report - Quarterly

Global Id: T0605900690
Action Type: Other
Date: 01/01/1950
Action: Leak Reported

Global Id: T0605900690
Action Type: RESPONSE
Date: 04/07/2009
Action: Soil and Water Investigation Report

Global Id: T0605900690
Action Type: RESPONSE
Date: 04/08/1991
Action: Other Report / Document

ORANGE CO. LUST:
Region: ORANGE
Facility Id: 88UT058

TEXACO (Continued) **S101629965**

Current Status: Post Remedial Action
Released Substance: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed: 06/29/2012
Case Type: Other Ground Water
Record ID: RO0002253

CA FID UST:
Facility ID: 30000798
Regulated By: UTNKA
Regulated ID: Not reported
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 7148470027
Mail To: Not reported
Mailing Address: 3631 HBR BLVD STE 225 PAU
Mailing Address 2: Not reported
Mailing City,St,Zip: HUNTINGTON BEACH 92647
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

SWEEPS UST:
Status: Not reported
Comp Number: 4385
Number: Not reported
Board Of Equalization: 44-000217
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Tank Status: Not reported
Owner Tank Id: Not reported
Swrcb Tank Id: 30-000-004385-000001
Actv Date: Not reported
Capacity: 15000
Tank Use: UNKNOWN
Stg: PRODUCT
Content: Not reported
Number Of Tanks: 3

Status: Not reported
Comp Number: 4385
Number: Not reported
Board Of Equalization: 44-000217
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Tank Status: Not reported
Owner Tank Id: Not reported
Swrcb Tank Id: 30-000-004385-000002
Actv Date: Not reported
Capacity: 15000
Tank Use: UNKNOWN

TEXACO (Continued) **S101629965**

Stg: PRODUCT
Content: Not reported
Number Of Tanks: Not reported

Status: Not reported
Comp Number: 4385
Number: Not reported
Board Of Equalization: 44-000217
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Tank Status: Not reported
Owner Tank Id: Not reported
Swrcb Tank Id: 30-000-004385-000003
Actv Date: Not reported
Capacity: 15000
Tank Use: UNKNOWN
Stg: PRODUCT
Content: Not reported
Number Of Tanks: Not reported

Status: Active
Comp Number: 4385
Number: 9
Board Of Equalization: 44-000217
Referral Date: 09-30-92
Action Date: 09-15-92
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: Not reported
Swrcb Tank Id: 30-000-004385-000004
Actv Date: Not reported
Capacity: 10000
Tank Use: M.V. FUEL
Stg: P
Content: LEADED
Number Of Tanks: 5

Status: Active
Comp Number: 4385
Number: 9
Board Of Equalization: 44-000217
Referral Date: 09-30-92
Action Date: 09-15-92
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: Not reported
Swrcb Tank Id: 30-000-004385-000005
Actv Date: Not reported
Capacity: 10000
Tank Use: M.V. FUEL
Stg: P
Content: REG UNLEADED
Number Of Tanks: Not reported

Status: Active
Comp Number: 4385

TEXACO (Continued) **S101629965**

Number:	9
Board Of Equalization:	44-000217
Referral Date:	09-30-92
Action Date:	09-15-92
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	Not reported
Swrcb Tank Id:	30-000-004385-000006
Actv Date:	Not reported
Capacity:	10000
Tank Use:	M.V. FUEL
Stg:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported

Status:	Active
Comp Number:	4385
Number:	9
Board Of Equalization:	44-000217
Referral Date:	09-30-92
Action Date:	09-15-92
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	Not reported
Swrcb Tank Id:	30-000-004385-000007
Actv Date:	Not reported
Capacity:	10000
Tank Use:	M.V. FUEL
Stg:	P
Content:	DIESEL
Number Of Tanks:	Not reported

Status:	Active
Comp Number:	4385
Number:	9
Board Of Equalization:	44-000217
Referral Date:	09-30-92
Action Date:	09-15-92
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	Not reported
Swrcb Tank Id:	30-000-004385-000011
Actv Date:	Not reported
Capacity:	500
Tank Use:	PETROLEUM
Stg:	P
Content:	Not reported
Number Of Tanks:	Not reported

C36 **TEXACO (121495)** **CA UST** **U003721242**
SW **6962 EDINGER AVE** **N/A**
< 1/8 **HUNTINGTON BEACH, CA 92647**
0.048 mi.
253 ft. **Site 14 of 16 in cluster C**

Relative: UST:
Lower Facility ID: 4385
Latitude: 33.73006
Actual: Longitude: -118.00736
21 ft.

C37 **EDR US Hist Auto Stat** **1015602818**
SW **6962 EDINGER AVE** **N/A**
< 1/8 **HUNTINGTON BEACH, CA 92647**
0.048 mi.
253 ft. **Site 15 of 16 in cluster C**

Relative: EDR Historical Auto Stations:
Lower Name: GOLD STAR TEXACO
Year: 1999
Actual: Address: 6962 EDINGER AVE
21 ft.

C38 **TEXACO** **CA LUST** **U001831034**
SW **6962 EDINGER AVE** **CA HIST UST** **N/A**
< 1/8 **HUNTINGTON BEACH, CA 92647**
0.048 mi.
253 ft. **Site 16 of 16 in cluster C**

Relative: LUST REG 8:
Lower Region: 8
County: Orange
Actual: Regional Board: Santa Ana Region
21 ft. Facility Status: Remedial action (cleanup) Underway
Case Number: 083000874T
Local Case Num: 88UT058
Case Type: Other ground water affected
Substance: Gasoline
Qty Leaked: 0
Abate Method: Not reported
Cross Street: Not reported
Enf Type: SEL
Funding: Not reported
How Discovered: Tank Closure
How Stopped: Close Tank
Leak Cause: Unknown
Leak Source: Unknown
Global ID: T0605900690
How Stopped Date: 9/9/9999
Enter Date: Not reported
Review Date: Not reported
Prelim Assess: Not reported
Discover Date: 3/22/1988
Enforcement Date: Not reported
Close Date: Not reported
Workplan: Not reported
Pollution Char: Not reported
Remed Plan: Not reported
Remed Action: 1/1/1965

TEXACO (Continued) **U001831034**

Monitoring: 5/1/2003
Enter Date: Not reported
GW Qualifies: =
Soil Qualifies: =
Operator: Not reported
Facility Contact: Not reported
Interim: Not reported
Oversite Program: LUST
Latitude: 33.7298091
Longitude: -118.0073256
MTBE Date: 9/9/2002
Max MTBE GW: 310
MTBE Concentration: 0
Max MTBE Soil: 830
MTBE Fuel: 1
MTBE Tested: MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class: *
Staff: TME
Staff Initials: KC
Lead Agency: Local Agency
Local Agency: 30000L
Hydr Basin #: Not reported
Beneficial: MUN
Priority: Not reported
Cleanup Fund Id: Not reported
Work Suspended: Not reported
Summary: Not reported

HIST UST:
Region: STATE
Facility ID: 00000016035
Facility Type: Gas Station
Other Type: Not reported
Total Tanks: 0003
Contact Name: CONTRACTOR CHONG
Telephone: 0000000000
Owner Name: TEXACO U.S.A.
Owner Address: 3350 WILSHIRE BLVD.
Owner City,St,Zip: LOS ANGELES, CA 90010

Tank Num: 001
Container Num: 1
Year Installed: Not reported
Tank Capacity: 00015000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Tank Construction: Not reported
Leak Detection: Stock Inventor, None

Tank Num: 002
Container Num: 2
Year Installed: Not reported
Tank Capacity: 00015000
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Tank Construction: Not reported
Leak Detection: Stock Inventor, None

TEXACO (Continued) **U001831034**

Tank Num: 003
Container Num: 3
Year Installed: Not reported
Tank Capacity: 00015000
Tank Used for: PRODUCT
Type of Fuel: PREMIUM
Tank Construction: Not reported
Leak Detection: Stock Inventor, None

F39 **EDR US Hist Auto Stat** **1015625188**
NE **7501 MCFADDEN AVE** **N/A**
< 1/8 **HUNTINGTON BEACH, CA 92647**
0.062 mi.
325 ft. **Site 1 of 3 in cluster F**

Relative:
Higher

Actual:
43 ft.

EDR Historical Auto Stations:

Name: FORD SERVICE & REPAIR
Year: 2004
Address: 7501 MCFADDEN AVE

Name: HANSA MOTORS
Year: 2005
Address: 7501 MCFADDEN AVE

Name: HANSA MOTORS
Year: 2006
Address: 7501 MCFADDEN AVE

Name: HANSA MOTORS
Year: 2007
Address: 7501 MCFADDEN AVE

Name: HANSA MOTORS
Year: 2008
Address: 7501 MCFADDEN AVE

Name: MERCEDES SERVICE & REPAIR HANSA MOTO
Year: 2009
Address: 7501 MCFADDEN AVE

Name: HANSA MOTORSRV & BOAT STG
Year: 2010
Address: 7501 MCFADDEN AVE

F40 **HOFFMAN ENT** **RCRA-SQG** **1000595878**
NE **7501 MCFADDEN** **FINDS** **CAD983598368**
< 1/8 **HUNTINGTON BEACH, CA**
0.062 mi.
325 ft. **Site 2 of 3 in cluster F**

Relative:
Higher

Actual:
43 ft.

RCRA-SQG:
Date form received by agency: 07/29/1991
Facility name: HOFFMAN ENT
Facility address: 7501 MCFADDEN
HUNTINGTON BEACH, CA 92647
EPA ID: CAD983598368

HOFFMAN ENT (Continued) **1000595878**

Contact: FRANK HOFFMAN
Contact address: 7501 MCFADDEN
HUNTINGTON BEACH, CA 92647
Contact country: US
Contact telephone: (714) 897-7444
Contact email: Not reported
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: FRANK HOFFMAN
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110002855535

HOFFMAN ENT (Continued) **1000595878**

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

G41 **GTE OF CALIFORNIA** **CA LUST** **S105935661**
SSE **7280 EDINGER** **N/A**
< 1/8 **HUNTINGTON BEACH, CA 92647**
0.070 mi.
372 ft. **Site 1 of 2 in cluster G**

Relative:
Lower

Actual:
21 ft.

LUST REG 8:

Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	083001914T
Local Case Num:	91UT127
Case Type:	Other ground water affected
Substance:	Diesel
Qty Leaked:	0
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Close Tank
Leak Cause:	Unknown
Leak Source:	Unknown
Global ID:	T0605901426
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Review Date:	Not reported
Prelim Assess:	Not reported
Discover Date:	10/16/1991
Enforcement Date:	Not reported
Close Date:	5/28/1992
Workplan:	Not reported
Pollution Char:	Not reported
Remed Plan:	Not reported
Remed Action:	Not reported
Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.729844
Longitude:	-117.9998583
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0

GTE OF CALIFORNIA (Continued) **S105935661**

Max MTBE Soil:	Not reported
MTBE Fuel:	0
MTBE Tested:	Not Required to be Tested.
MTBE Class:	*
Staff:	RS
Staff Initials:	KC
Lead Agency:	Local Agency
Local Agency:	30000L
Hydr Basin #:	Not reported
Beneficial:	MUN
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

G42 **GTE OF CALIFORNIA** **CA HIST CORTESE U003721237**
SSE **7280 EDINGER AVE** **CA LUST N/A**
< 1/8 **HUNTINGTON BEACH, CA 92647**
0.070 mi.
372 ft. **Site 2 of 2 in cluster G**

Relative:
Lower

Actual:
21 ft.

CORTESE:

Region:	CORTESE
Facility County Code:	30
Reg By:	LTNKA
Reg Id:	083001914T

LUST:

Region:	STATE
Global Id:	T0605901426
Latitude:	33.7300594
Longitude:	-118.0001314
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	05/28/1992
Lead Agency:	ORANGE COUNTY LOP
Case Worker:	KC
Local Agency:	ORANGE COUNTY LOP
RB Case Number:	083001914T
LOC Case Number:	91UT127
File Location:	Local Agency
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Diesel
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0605901426
Contact Type:	Regional Board Caseworker
Contact Name:	ROSE SCOTT
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500
City:	RIVERSIDE
Email:	rscott@waterboards.ca.gov
Phone Number:	9513206375

Global Id: T0605901426

GTE OF CALIFORNIA (Continued) **U003721237**

Contact Type: Local Agency Caseworker
Contact Name: GENIECE HIGGINS
Organization Name: ORANGE COUNTY LOP
Address: 1241 EAST DYER ROAD SUITE 120
City: SANTA ANA
Email: ghiggins@ochca.com
Phone Number: 7144336260

Status History:
Global Id: T0605901426
Status: Completed - Case Closed
Status Date: 05/28/1992

Global Id: T0605901426
Status: Open - Case Begin Date
Status Date: 10/16/1991

Regulatory Activities:
Global Id: T0605901426
Action Type: Other
Date: 01/01/1950
Action: Leak Reported

Global Id: T0605901426
Action Type: Other
Date: 01/01/1950
Action: Leak Discovery

Global Id: T0605901426
Action Type: REMEDIATION
Date: 01/01/1950
Action: Excavation

ORANGE CO. LUST:
Region: ORANGE
Facility Id: 91UT127
Current Status: Certification (Case Closed)
Released Substance: Diesel fuel oil and additives, Nos.1-D, 2-D, 2-4
Date Closed: 05/28/1992
Case Type: Other Ground Water
Record ID: RO0002655

F43 **DLG HUNTINGTON BCH MINI STGE** **CA UST** **U003778738**
ENE **7531 MCFADDEN AVE** **N/A**
< 1/8 **HUNTINGTON BEACH, CA 92647**
0.108 mi.
571 ft. **Site 3 of 3 in cluster F**

Relative:
Higher

Actual:
44 ft.

UST:
Facility ID: 10406
Latitude: 33.73733
Longitude: -117.99737

H44 **GOLDEN W CLEANERS** **CA DRYCLEANERS** **S105030835**
NNW **15382 GOLDENWEST ST** **N/A**
< 1/8 **WESTMINSTER, CA 92683**
0.110 mi.
579 ft. **Site 1 of 2 in cluster H**

Relative:
Higher

Actual:
24 ft.

DRYCLEANERS:

EPA Id:	CAD981977937
NAICS Code:	81232
NAICS Description:	Drycleaning and Laundry Services (except Coin-Operated)
SIC Code:	7211
SIC Description:	Power Laundries, Family and Commercial
Create Date:	07/03/1987
Facility Active:	No
Inactive Date:	06/30/2010
Facility Addr2:	Not reported
Owner Name:	KYUNG BECK CHO
Owner Address:	15382 GOLDENWEST ST
Owner Address 2:	Not reported
Owner Telephone:	7148937524
Contact Name:	KYUNG BECK CHO OWNER
Contact Address:	15382 GOLDENWEST ST
Contact Address 2:	Not reported
Contact Telephone:	7148937524
EDR Link ID:	CAD981977937

H45 **EDR US Hist Cleaners** **1014997990**
NNW **15382 GOLDENWEST ST** **N/A**
< 1/8 **WESTMINSTER, CA 92683**
0.110 mi.
579 ft. **Site 2 of 2 in cluster H**

Relative:
Higher

Actual:
24 ft.

EDR Historical Cleaners:

Name:	GOLDEN WEST CLEANERS
Year:	2003
Address:	15382 GOLDENWEST ST
Name:	GOLDENWEST CLEANERS & SHIRT LAUNDRY
Year:	2005
Address:	15382 GOLDENWEST ST
Name:	GOLDENWEST CLEANERS & SHIRT LAUNDRY
Year:	2006
Address:	15382 GOLDENWEST ST
Name:	GOLDENWEST CLEANERS
Year:	2010
Address:	15382 GOLDENWEST ST

I46 **UNOCAL #5826** **CA UST** **U003942713**
SE **7361 EDINGER AVE** **N/A**
< 1/8 **HUNTINGTON BEACH, CA 92647**
0.120 mi.
636 ft. **Site 1 of 7 in cluster I**

Relative:
Lower

Actual:
21 ft.

UST:
Facility ID: 2168
Latitude: 33.73021
Longitude: -118.00022

I47 **SERVICE STATION 5826** **CA HIST UST** **U001577293**
SE **7361 EDINGER AVE** **N/A**
< 1/8 **HUNTINGTON BEACH, CA 92647**
0.120 mi.
636 ft. **Site 2 of 7 in cluster I**

Relative:
Lower

Actual:
21 ft.

HIST UST:
Region: STATE
Facility ID: 00000018027
Facility Type: Gas Station
Other Type: Not reported
Total Tanks: 0003
Contact Name: JOHN LUZZI
Telephone: 7148984716
Owner Name: UNION OIL COMPANY OF CALIFORNI
Owner Address: 3701 WILSHIRE BOULEVARD-SUITE
Owner City,St,Zip: LOS ANGELES, CA 90010

Tank Num: 001
Container Num: 5826-4
Year Installed: 1968
Tank Capacity: 00000550
Tank Used for: WASTE
Type of Fuel: WASTE OIL
Tank Construction: Not reported
Leak Detection: Stock Inventor, Pressure Test

Tank Num: 002
Container Num: 5826-2
Year Installed: 1968
Tank Capacity: 00009940
Tank Used for: PRODUCT
Type of Fuel: PREMIUM
Tank Construction: Not reported
Leak Detection: Stock Inventor, Pressure Test

Tank Num: 003
Container Num: 5826-1
Year Installed: 1968
Tank Capacity: 00009940
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Tank Construction: Not reported
Leak Detection: Stock Inventor, Pressure Test

I48 **UNION OIL SERVICE STATION 5826** **CA HIST UST** **U001577309**
SE **7361 EDINGER AVE** **N/A**
< 1/8 **HUNTINGTON BEACH, CA 92647**
0.120 mi.
636 ft. **Site 3 of 7 in cluster I**

Relative:
Lower

Actual:
21 ft.

HIST UST:

Region:	STATE
Facility ID:	00000056246
Facility Type:	Gas Station
Other Type:	Not reported
Total Tanks:	0001
Contact Name:	JOHN LUZZI
Telephone:	7148984716
Owner Name:	UNION OIL COMPANY OF CALIFORNI
Owner Address:	3701 WILSHIRE BOULEVARD-SUITE
Owner City,St,Zip:	LOS ANGELES, CA 90010
Tank Num:	001
Container Num:	1
Year Installed:	Not reported
Tank Capacity:	00000180
Tank Used for:	WASTE
Type of Fuel:	WASTE OIL
Tank Construction:	Not reported
Leak Detection:	None

I49 **UNOCAL #5826** **CA HIST CORTESE** **1000166832**
SE **7361 EDINGER AVE** **CA LUST** **N/A**
< 1/8 **HUNTINGTON BEACH, CA 92647**
0.120 mi.
636 ft. **Site 4 of 7 in cluster I**

Relative:
Lower

Actual:
21 ft.

CORTESE:

Region:	CORTESE
Facility County Code:	30
Reg By:	LTNKA
Reg Id:	083001929T

LUST:

Region:	STATE
Global Id:	T0605901437
Latitude:	33.730234
Longitude:	-117.9994883
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	08/10/1994
Lead Agency:	ORANGE COUNTY LOP
Case Worker:	KC
Local Agency:	ORANGE COUNTY LOP
RB Case Number:	083001929T
LOC Case Number:	91UT107
File Location:	Local Agency
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Waste Oil / Motor / Hydraulic / Lubricating, Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

UNOCAL #5826 (Continued) **1000166832**

Contact:
Global Id: T0605901437
Contact Type: Regional Board Caseworker
Contact Name: NANCY OLSON-MARTIN
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 MAIN STREET, SUITE 500
City: RIVERSIDE
Email: nolson-martin@waterboards.ca.gov
Phone Number: Not reported

Global Id: T0605901437
Contact Type: Local Agency Caseworker
Contact Name: GENIECE HIGGINS
Organization Name: ORANGE COUNTY LOP
Address: 1241 EAST DYER ROAD SUITE 120
City: SANTA ANA
Email: ghiggins@ochca.com
Phone Number: 7144336260

Status History:
Global Id: T0605901437
Status: Completed - Case Closed
Status Date: 08/10/1994

Global Id: T0605901437
Status: Open - Case Begin Date
Status Date: 09/26/1991

Regulatory Activities:
Global Id: T0605901437
Action Type: Other
Date: 01/01/1950
Action: Leak Reported

Global Id: T0605901437
Action Type: Other
Date: 01/01/1950
Action: Leak Discovery

Global Id: T0605901437
Action Type: REMEDIATION
Date: 01/01/1950
Action: Excavation

ORANGE CO. LUST:
Region: ORANGE
Facility Id: 91UT107
Current Status: Certification (Case Closed)
Released Substance: Waste oil/Used oil
Date Closed: 08/10/1994
Case Type: Other Ground Water
Record ID: RO0002170

Region: ORANGE

UNOCAL #5826 (Continued) **1000166832**

Facility Id: 91UT107
Current Status: Not reported
Released Substance: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed: 08/10/1994
Case Type: Not reported
Record ID: RO0002170

I50 **UNOCAL #5826** **CA LUST** **S106176656**
SE **7361 EDINGER** **N/A**
< 1/8 **HUNTINGTON BEACH, CA 92647**
0.120 mi.
636 ft. **Site 5 of 7 in cluster I**

Relative:
Lower

Actual:
21 ft.

LUST REG 8:
Region: 8
County: Orange
Regional Board: Santa Ana Region
Facility Status: Case Closed
Case Number: 083001929T
Local Case Num: 91UT107
Case Type: Other ground water affected
Substance: 12035,800661
Qty Leaked: 0
Abate Method: Not reported
Cross Street: Not reported
Enf Type: Not reported
Funding: Not reported
How Discovered: Tank Closure
How Stopped: Close Tank
Leak Cause: Unknown
Leak Source: Unknown
Global ID: T0605901437
How Stopped Date: 9/9/9999
Enter Date: Not reported
Review Date: Not reported
Prelim Assess: Not reported
Discover Date: 9/26/1991
Enforcement Date: Not reported
Close Date: 8/10/1994
Workplan: Not reported
Pollution Char: Not reported
Remed Plan: Not reported
Remed Action: Not reported
Monitoring: Not reported
Enter Date: Not reported
GW Qualifies: Not reported
Soil Qualifies: Not reported
Operator: Not reported
Facility Contact: Not reported
Interim: Not reported
Oversite Program: LUST
Latitude: 33.730234
Longitude: -117.9994883
MTBE Date: Not reported
Max MTBE GW: Not reported
MTBE Concentration: 0
Max MTBE Soil: Not reported
MTBE Fuel: 0

UNOCAL #5826 (Continued) **S106176656**

MTBE Tested: Not Required to be Tested.
MTBE Class: *
Staff: NOM
Staff Initials: KC
Lead Agency: Local Agency
Local Agency: 30000L
Hydr Basin #: Not reported
Beneficial: MUN
Priority: Not reported
Cleanup Fund Id: Not reported
Work Suspended: Not reported
Summary: Not reported

I51 **EDR US Hist Auto Stat** **1015620955**
SE **7361 EDINGER AVE** **N/A**
< 1/8 **HUNTINGTON BEACH, CA 92647**
0.120 mi.
636 ft. **Site 6 of 7 in cluster I**

Relative:
Lower

Actual:
21 ft.

EDR Historical Auto Stations:

Name: EZ LUBE INCORPORATED
Year: 1999
Address: 7361 EDINGER AVE

Name: EZ LUBE INC
Year: 2003
Address: 7361 EDINGER AVE

Name: EZ LUBE INC
Year: 2004
Address: 7361 EDINGER AVE

Name: EZ LUBE INC
Year: 2006
Address: 7361 EDINGER AVE

Name: EZ LUBE INC
Year: 2007
Address: 7361 EDINGER AVE

Name: HUNTINGTON BEACH EZ LUBE
Year: 2008
Address: 7361 EDINGER AVE

Name: HUNTINGTON BEACH EZ LUBE
Year: 2009
Address: 7361 EDINGER AVE

Name: EZ LUBE HUNTINGTON BEACH
Year: 2010
Address: 7361 EDINGER AVE

Name: EZ LUBE
Year: 2012
Address: 7361 EDINGER AVE

I52 **BOARDWALK** **CA NPDES** **S104160877**
SE **7441 EDINGER AVENUE** **CA HIST CORTESE** **N/A**
1/8-1/4 **HUNTINGTON BEACH, CA 92648** **CA LUST**
0.144 mi.
760 ft. **Site 7 of 7 in cluster I**

Relative:
Lower

Actual:
22 ft.

NPDES:

Npdes Number:	CAS000002
Facility Status:	Active
Agency Id:	0
Region:	8
Regulatory Measure Id:	409647
Order No:	2009-0009-DWQ
Regulatory Measure Type:	Enrollee
Place Id:	Not reported
WDID:	8 30C360428
Program Type:	Construction
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	02/22/2011
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Sares Regis Group
Discharge Address:	18825 Bardeen Ave
Discharge City:	Irvine
Discharge State:	California
Discharge Zip:	92612

CORTESE:

Region:	CORTESE
Facility County Code:	30
Reg By:	LTNKA
Reg Id:	083000814T

LUST:

Region:	STATE
Global Id:	T0605900641
Latitude:	33.7308356291019
Longitude:	-117.999837398529
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	06/11/2012
Lead Agency:	ORANGE COUNTY LOP
Case Worker:	KC
Local Agency:	ORANGE COUNTY LOP
RB Case Number:	083000814T
LOC Case Number:	85UT108
File Location:	Local Agency
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0605900641
Contact Type:	Regional Board Caseworker
Contact Name:	NANCY OLSON-MARTIN
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500

BOARDWALK (Continued) **S104160877**

City: RIVERSIDE
Email: nolson-martin@waterboards.ca.gov
Phone Number: Not reported

Global Id: T0605900641
Contact Type: Local Agency Caseworker
Contact Name: GENIECE HIGGINS
Organization Name: ORANGE COUNTY LOP
Address: 1241 EAST DYER ROAD SUITE 120
City: SANTA ANA
Email: ghiggins@ochca.com
Phone Number: 7144336260

Status History:
Global Id: T0605900641
Status: Completed - Case Closed
Status Date: 02/23/2004

Global Id: T0605900641
Status: Completed - Case Closed
Status Date: 06/11/2012

Global Id: T0605900641
Status: Open - Case Begin Date
Status Date: 07/25/1985

Global Id: T0605900641
Status: Open - Remediation
Status Date: 03/14/2001

Global Id: T0605900641
Status: Open - Reopen Case
Status Date: 09/16/2011

Global Id: T0605900641
Status: Open - Site Assessment
Status Date: 09/16/2011

Global Id: T0605900641
Status: Open - Verification Monitoring
Status Date: 03/15/2001

Global Id: T0605900641
Status: Open - Verification Monitoring
Status Date: 12/16/2011

Regulatory Activities:
Global Id: T0605900641
Action Type: ENFORCEMENT
Date: 02/23/2004
Action: Closure/No Further Action Letter

Global Id: T0605900641
Action Type: ENFORCEMENT
Date: 09/22/2011
Action: Letter - Notice

BOARDWALK (Continued) **S104160877**

Global Id: T0605900641
Action Type: REMEDIATION
Date: 01/01/1950
Action: Excavation

Global Id: T0605900641
Action Type: ENFORCEMENT
Date: 12/20/2011
Action: Staff Letter

Global Id: T0605900641
Action Type: Other
Date: 01/01/1950
Action: Leak Began

Global Id: T0605900641
Action Type: ENFORCEMENT
Date: 09/22/2011
Action: Notice of Responsibility

Global Id: T0605900641
Action Type: REMEDIATION
Date: 01/01/1950
Action: Soil Vapor Extraction (SVE)

Global Id: T0605900641
Action Type: REMEDIATION
Date: 01/01/1950
Action: Other (Use Description Field)

Global Id: T0605900641
Action Type: ENFORCEMENT
Date: 11/29/2011
Action: Staff Letter

Global Id: T0605900641
Action Type: ENFORCEMENT
Date: 11/28/2011
Action: Staff Letter

Global Id: T0605900641
Action Type: ENFORCEMENT
Date: 12/12/2011
Action: Staff Letter

Global Id: T0605900641
Action Type: ENFORCEMENT
Date: 06/11/2012
Action: Closure/No Further Action Letter

Global Id: T0605900641
Action Type: REMEDIATION
Date: 01/01/1950
Action: Excavation

Global Id: T0605900641
Action Type: Other

BOARDWALK (Continued) **S104160877**

Date: 01/01/1950
Action: Leak Discovery

Global Id: T0605900641
Action Type: REMEDIATION
Date: 01/01/1950
Action: Excavation

Global Id: T0605900641
Action Type: ENFORCEMENT
Date: 05/21/2012
Action: Notification - Preclosure

Global Id: T0605900641
Action Type: ENFORCEMENT
Date: 10/27/2011
Action: Notification - Public Notice of ROD/RAP/CAP

Global Id: T0605900641
Action Type: ENFORCEMENT
Date: 09/22/2011
Action: Notice of Responsibility

Global Id: T0605900641
Action Type: Other
Date: 01/01/1950
Action: Leak Reported

ORANGE CO. LUST:
Region: ORANGE
Facility Id: 85UT108
Current Status: Certification (Case Closed)
Released Substance: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed: 06/11/2012
Case Type: Other Ground Water
Record ID: RO0000833

LUST REG 8:
Region: 8
County: Orange
Regional Board: Santa Ana Region
Facility Status: Case Closed
Case Number: 083000814T
Local Case Num: 85UT108
Case Type: Other ground water affected
Substance: Gasoline
Qty Leaked: 0
Abate Method: Not reported
Cross Street: Not reported
Enf Type: CLOS
Funding: Not reported
How Discovered: Tank Closure
How Stopped: Close Tank
Leak Cause: Unknown
Leak Source: Unknown

BOARDWALK (Continued) **S104160877**

Global ID:	T0605900641
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Review Date:	Not reported
Prelim Assess:	Not reported
Discover Date:	7/25/1985
Enforcement Date:	Not reported
Close Date:	2/23/2004
Workplan:	Not reported
Pollution Char:	Not reported
Remed Plan:	Not reported
Remed Action:	3/14/2001
Monitoring:	3/15/2001
Enter Date:	Not reported
GW Qualifies:	ND
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.729846
Longitude:	-117.9984962
MTBE Date:	2/24/2003
Max MTBE GW:	0
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class:	*
Staff:	NOM
Staff Initials:	KC
Lead Agency:	Local Agency
Local Agency:	30000L
Hydr Basin #:	Not reported
Beneficial:	MUN
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported

Summary: Not reported

53
SSW
1/8-1/4
0.150 mi.
791 ft.

HOME DEPOT USA HD 6685 EXPO
6912 EDINGER AVE
HUNTINGTON BEACH, CA 92647

RCRA NonGen / NLR **1000196420**
FINDS **CAD981967227**

Relative:
Lower

Actual:
18 ft.

RCRA NonGen / NLR:

Date form received by agency:	06/25/2009
Facility name:	HOME DEPOT USA HD 6685 EXPO
Facility address:	6912 EDINGER AVE HUNTINGTON BEACH, CA 92647
EPA ID:	CAD981967227
Mailing address:	1905 ASTON AVE STE 100 CARLSBAD, CA 92008
Contact:	ROSA L WHIPPLE
Contact address:	1905 ASTON AVE STE 100 CARLSBAD, CA 92008

HOME DEPOT USA HD 6685 EXPO (Continued) **1000196420**

Contact country: US
Contact telephone: 800-451-8346
Telephone ext.: 8842
Contact email: RWHIPPLE@3ECOMPANY.COM
EPA Region: 09
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: HOME DEPOT USA
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 07/22/1999
Owner/Op end date: Not reported

Owner/operator name: HOME DEPOT USA
Owner/operator address: 2455 PACES FERRY RD D 17
ATLANTA, GA 30339
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 07/22/1999
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 06/22/2005
Facility name: HOME DEPOT USA HD 6685 EXPO
Site name: HOME DEPOT USA INC HD 6685
Classification: Small Quantity Generator

Date form received by agency: 09/24/1999
Facility name: HOME DEPOT USA HD 6685 EXPO
Site name: THE HOME DEPOT NO 6685
Classification: Small Quantity Generator

HOME DEPOT USA HD 6685 EXPO (Continued) **1000196420**

Violation Status: No violations found

FINDS:

Registry ID: 110002758720

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

J54 **SENTRY METAL FORMING (FWY PRK)** **CA SLIC** **S102859333**
SSE **16072 GOTHARD** **N/A**
1/8-1/4 **HUNTINGTON BEACH, CA**
0.155 mi.
820 ft. **Site 1 of 3 in cluster J**

Relative:
Lower

Actual:
21 ft.

SLIC:

Region:	STATE
Facility Status:	**Open - Site Assessment**
Status Date:	12/01/2000
Global Id:	SL208603905
Lead Agency:	SANTA ANA RWQCB (REGION 8)
Lead Agency Case Number:	Not reported
Latitude:	33.73003
Longitude:	-117.999191
Case Type:	Cleanup Program Site
Case Worker:	MGC
Local Agency:	Not reported
RB Case Number:	SL208603905
File Location:	Regional Board
Potential Media Affected:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Not reported
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

SLIC REG 8:

Type:	Soil and Groundwater
Facility Status:	Additional Characterization Underway
Region:	8
Staff:	MGC
Substance:	MGC
Lead Agency:	MGC
Location Code:	MGC
Thomas Bros Code:	MGC

J55 **MUTUAL METAL STAMPING & MFG INC** **RCRA-SQG** **1000424007**
SSE **16072 GOTHARD** **FINDS** **CAD008380180**
1/8-1/4 **HUNTINGTON BEACH, CA 92647**
0.155 mi.
820 ft. **Site 2 of 3 in cluster J**

Relative:
Lower

Actual:
21 ft.

RCRA-SQG:

Date form received by agency:	09/01/1996
Facility name:	MUTUAL METAL STAMPING & MFG INC
Facility address:	16072 GOTHARD HUNTINGTON BEACH, CA 92647
EPA ID:	CAD008380180
Mailing address:	GOTHARD HUNTINGTON BEACH, CA 92647
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No

MUTUAL METAL STAMPING & MFG INC (Continued) **1000424007**

Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110002633749

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

K56 **LEVITZ FURNITURE CO** **CA UST** **U003782839**
SE **7441 EDINGER AVE** **CA EMI** **N/A**
1/8-1/4 **HUNTINGTON BEACH, CA 92647**
0.160 mi.
844 ft. **Site 1 of 2 in cluster K**

Relative:
Lower

Actual:
22 ft.

UST:
Facility ID: 4390
Latitude: 33.73024
Longitude: -117.99873

EMI:

Year:	1987
County Code:	30
Air Basin:	SC
Facility ID:	13803
Air District Name:	SC
SIC Code:	5199
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	13
Reactive Organic Gases Tons/Yr:	13
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	1
Part. Matter 10 Micrometers & Smllr Tons/Yr:	1

Year:	1990
County Code:	30
Air Basin:	SC
Facility ID:	13803
Air District Name:	SC
SIC Code:	5712

LEVITZ FURNITURE CO (Continued) **U003782839**

Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	24
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1995
County Code:	30
Air Basin:	SC
Facility ID:	13803
Air District Name:	SC
SIC Code:	5712
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

K57 **LEVITZ FURNITURE CO.** **CA HIST UST** **U001577274**
SE **7441 EDINGER AVE** **N/A**
1/8-1/4 **HUNTINGTON BEACH, CA 92647**
0.160 mi.
844 ft. **Site 2 of 2 in cluster K**

Relative:
Lower

Actual:
22 ft.

HIST UST:

Region:	STATE
Facility ID:	00000004579
Facility Type:	Other
Other Type:	FURNITURE RETAIL
Total Tanks:	0001
Contact Name:	MARIO NOE
Telephone:	7148945381
Owner Name:	LEVITZ FURNITURE CO. OF THE PA
Owner Address:	1317 N.W. 167TH ST.
Owner City,St,Zip:	MIAMI, FL 33169

Tank Num:	001
Container Num:	1
Year Installed:	1969
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Tank Construction:	Not reported
Leak Detection:	Visual

L58 **COSTCO WHOLESALE NO 1110** **RCRA-SQG** **1014922579**
East **7562 CENTER AVE** **CAR000223792**
1/8-1/4 **HUNTINGTON BEACH, CA 92348**
0.170 mi.
899 ft. **Site 1 of 2 in cluster L**

Relative:
Lower

Actual:
22 ft.

RCRA-SQG:

Date form received by agency:	03/05/2012
Facility name:	COSTCO WHOLESALE NO 1110
Facility address:	7562 CENTER AVE HUNTINGTON BEACH, CA 92348
EPA ID:	CAR000223792
Mailing address:	PO BOX 35005 ATTN LISA SIMPSON SEATTLE, WA 98124
Contact:	LISA SIMPSON
Contact address:	PO BOX 35005 ATTN LISA SIMPSON SEATTLE, WA 98124
Contact country:	US
Contact telephone:	425-313-6275
Contact email:	LSIMPSON@COSTCO.COM
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	COSTCO WHOLESALE CORP
Owner/operator address:	999 LAKE DRIVE ISSAQUAH, WA 98027
Owner/operator country:	US
Owner/operator telephone:	425-313-8100
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	05/01/2011
Owner/Op end date:	Not reported

Owner/operator name:	ROD SKINN
Owner/operator address:	Not reported Not reported
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	01/27/2012
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No

COSTCO WHOLESALE NO 1110 (Continued) **1014922579**

Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D011
Waste name: SILVER

Waste code: D018
Waste name: BENZENE

Violation Status: No violations found

L59
East
1/8-1/4
0.173 mi.
913 ft.

Relative:
Lower

Actual:
22 ft.

COSTCO GAS STATION #1110 **CA UST** **U004187885**
7564 CENTER AVE **N/A**
HUNTINGTON BEACH, CA 92647

Site 2 of 2 in cluster L

ORANGE CO. UST:
Facility ID: FA0058142

M60
SW
1/8-1/4
0.178 mi.
940 ft.

Relative:
Lower

Actual:
17 ft.

EDR US Hist Cleaners **1015087217**
6834 EDINGER AVE **N/A**
HUNTINGTON BEACH, CA 92647

Site 1 of 3 in cluster M

EDR Historical Cleaners:
Name: OCEAN AIRE DRY CLEANERS
Year: 2001
Address: 6834 EDINGER AVE

Name: OCEAN AIRE DRY CLEANERS
Year: 2003
Address: 6834 EDINGER AVE

Name: OCEAN AIRE DRY CLEANERS
Year: 2004
Address: 6834 EDINGER AVE

Name: OCEAN AIRE DRY CLEANERS
Year: 2008

(Continued) **1015087217**

Address: 6834 EDINGER AVE

Name: OCEAN AIRE DRY CLEANERS
Year: 2010
Address: 6834 EDINGER AVE

M61 **OCEAN AIRE** **RCRA-SQG** **1000150113**
SW **6834 EDINGER** **FINDS** **CAD981673387**
1/8-1/4 **HUNTINGTON BEACH, CA 92647**
0.178 mi.
940 ft. **Site 2 of 3 in cluster M**

Relative:
Lower

Actual:
17 ft.

RCRA-SQG:
Date form received by agency: 09/01/1996
Facility name: OCEAN AIRE
Facility address: 6834 EDINGER
HUNTINGTON BEACH, CA 92647
EPA ID: CAD981673387
Mailing address: EDINGER
HUNTINGTON BEACH, CA 92647
Contact: Not reported
Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 09
Land type: Facility is not located on Indian land. Additional information is not known.
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: MIKE OSTO
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

OCEAN AIRE (Continued) **1000150113**

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

Evaluation Action Summary:
Evaluation date: 08/03/1994
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State Contractor/Grantee

Evaluation date: 07/14/1994
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State Contractor/Grantee

FINDS:

Registry ID: 110002745682

Environmental Interest/Information System
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J62 **PRODUCTION PLATING#** **RCRA-SQG** **1000193038**
SSE **16091 GOTHARD STREET** **CA LUST** **CAD064460041**
1/8-1/4 **HUNTINGTON BEACH, CA 92647** **CA HIST UST**
0.182 mi. **CA EMI**
962 ft. **Site 3 of 3 in cluster J**

Relative:
Lower

Actual:
20 ft.

RCRA-SQG:
Date form received by agency: 09/01/1996
Facility name: PRODUCTION PLATING#
Facility address: 16091 GOTHARD STREET
HUNTINGTON BEACH, CA 92647
EPA ID: CAD064460041

PRODUCTION PLATING# (Continued) **1000193038**

Mailing address: GOTHARD STREET
HUNTINGTON BEACH, CA 92647
Contact: Not reported
Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

PRODUCTION PLATING# (Continued) **1000193038**

LUST:

Region:	STATE
Global Id:	T0605901441
Latitude:	33.728739
Longitude:	-118.000869
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	11/20/1997
Lead Agency:	ORANGE COUNTY LOP
Case Worker:	GH
Local Agency:	ORANGE COUNTY LOP
RB Case Number:	083001933T
LOC Case Number:	91UT088
File Location:	Local Agency
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Diesel, Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0605901441
Contact Type:	Regional Board Caseworker
Contact Name:	ROSE SCOTT
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500
City:	RIVERSIDE
Email:	rscott@waterboards.ca.gov
Phone Number:	9513206375

Global Id:	T0605901441
Contact Type:	Local Agency Caseworker
Contact Name:	GENIECE HIGGINS
Organization Name:	ORANGE COUNTY LOP
Address:	1241 EAST DYER ROAD SUITE 120
City:	SANTA ANA
Email:	ghiggins@ochca.com
Phone Number:	7144336260

Status History:

Global Id:	T0605901441
Status:	Completed - Case Closed
Status Date:	11/20/1997

Global Id:	T0605901441
Status:	Open - Case Begin Date
Status Date:	07/24/1991

Regulatory Activities:

Global Id:	T0605901441
Action Type:	Other
Date:	01/01/1950
Action:	Leak Reported

Global Id:	T0605901441
Action Type:	Other

PRODUCTION PLATING# (Continued) **1000193038**

Date: 01/01/1950
Action: Leak Discovery

Global Id: T0605901441
Action Type: REMEDIATION
Date: 01/01/1950
Action: Excavation

ORANGE CO. LUST:
Region: ORANGE
Facility Id: 91UT088
Current Status: Certification (Case Closed)
Released Substance: Diesel fuel oil and additives, Nos.1-D, 2-D, 2-4
Date Closed: 11/20/1997
Case Type: Other Ground Water
Record ID: RO0002982

Region: ORANGE
Facility Id: 91UT088
Current Status: Not reported
Released Substance: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed: 11/20/1997
Case Type: Not reported
Record ID: RO0002982

LUST REG 8:
Region: 8
County: Orange
Regional Board: Santa Ana Region
Facility Status: Case Closed
Case Number: 083001933T
Local Case Num: 91UT088
Case Type: Other ground water affected
Substance: 12034,800661
Qty Leaked: 0
Abate Method: Not reported
Cross Street: Not reported
Enf Type: Not reported
Funding: Not reported
How Discovered: Tank Closure
How Stopped: Close Tank
Leak Cause: Unknown
Leak Source: Unknown
Global ID: T0605901441
How Stopped Date: 9/9/9999
Enter Date: Not reported
Review Date: Not reported
Prelim Assess: Not reported
Discover Date: 7/24/1991
Enforcement Date: Not reported
Close Date: 11/20/1997
Workplan: Not reported
Pollution Char: Not reported
Remed Plan: Not reported
Remed Action: Not reported

PRODUCTION PLATING# (Continued) **1000193038**

Monitoring: Not reported
Enter Date: Not reported
GW Qualifies: Not reported
Soil Qualifies: Not reported
Operator: Not reported
Facility Contact: Not reported
Interim: Not reported
Oversite Program: LUST
Latitude: 33.729027
Longitude: -118.0002093
MTBE Date: Not reported
Max MTBE GW: Not reported
MTBE Concentration: 0
Max MTBE Soil: Not reported
MTBE Fuel: 0
MTBE Tested: Not Required to be Tested.
MTBE Class: *
Staff: RS
Staff Initials: AR
Lead Agency: Local Agency
Local Agency: 30000L
Hydr Basin #: Not reported
Beneficial: MUN
Priority: Not reported
Cleanup Fund Id: Not reported
Work Suspended: Not reported
Summary: Not reported

HIST UST:
Region: STATE
Facility ID: 00000054627
Facility Type: Other
Other Type: MANUFACTURING
Total Tanks: 0004
Contact Name: NOEL GUZMAN
Telephone: 7148472511
Owner Name: PRODUCTION PLATING
Owner Address: 16091 GOTHARD ST.
Owner City,St,Zip: HUNTINGTON BEACH, CA 92647

Tank Num: 001
Container Num: 4
Year Installed: 1973
Tank Capacity: 00001200
Tank Used for: WASTE
Type of Fuel: Not reported
Tank Construction: 4 inches
Leak Detection: Visual

Tank Num: 002
Container Num: 1
Year Installed: 1982
Tank Capacity: 00002000
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Tank Construction: 3/16 inches
Leak Detection: Visual, Stock Inventor

PRODUCTION PLATING# (Continued) **1000193038**

Tank Num: 003
Container Num: 2
Year Installed: 1978
Tank Capacity: 00002000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Tank Construction: 3/16 inches
Leak Detection: Visual, Stock Inventor

Tank Num: 004
Container Num: 3
Year Installed: 1979
Tank Capacity: 00002000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Tank Construction: 3/16 inches
Leak Detection: Visual, Stock Inventor

EMI:

Year:	1987
County Code:	30
Air Basin:	SC
Facility ID:	14113
Air District Name:	SC
SIC Code:	3471
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	1
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1990
County Code:	30
Air Basin:	SC
Facility ID:	14113
Air District Name:	SC
SIC Code:	3365
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	1
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

N63 **NEXCYCLE** **CA SWRCY** **S107137396**
NNW **15300 GOLDENWEST ST** **N/A**
1/8-1/4 **WESTMINSTER, CA 92683**
0.186 mi.
980 ft. **Site 1 of 4 in cluster N**

Relative:
Higher

Actual:
25 ft.

SWRCY:

Reg Id:	27936
Cert Id:	RC1523
Mailing Address:	25837 Business Center Dr Ste F
Mailing City:	Redlands
Mailing State:	CA
Mailing Zip Code:	92374
Website:	Not reported
Phone Number:	(909) 796-2210
Grand Father:	N
Rural:	N
Operation Begin Date:	12/17/1987
Aluminium:	Y
Glass:	Y
Plastic:	Y
Bimetal:	Y
Agency:	N/A
Monday Hours Of Operation:	10:00 am - 5:00 pm; Closed 1:00 pm - 2:00 pm
Tuesday Hours Of Operation:	CLOSED
Wednesday Hours Of Operation:	10:00 am - 5:00 pm; Closed 1:00 pm - 2:00 pm
Thursday Hours Of Operation:	CLOSED
Friday Hours Of Operation:	10:00 am - 5:00 pm; Closed 1:00 pm - 2:00 pm
Saturday Hours Of Operation:	9:00 am - 4:00 pm; Closed 1:00 pm - 2:00 pm
Sunday Hours Of Operation:	9:00 am - 4:00 pm; Closed 1:00 pm - 2:00 pm
Cert Status:	Operational
Organization ID:	18826
Organization Name:	Contain-A-Way Inc
Agency Reg ID:	N/A
Operation End Date:	Not reported

O64 **ACRONTOS MFG** **RCRA-SQG** **1000198148**
SSE **16131 GOTHARD STREET STE L** **FINDS** **CAD094124112**
1/8-1/4 **HUNTINGTON BEACH, CA 92647**
0.207 mi.
1095 ft. **Site 1 of 9 in cluster O**

Relative:
Lower

Actual:
19 ft.

RCRA-SQG:

Date form received by agency:	11/15/1991
Facility name:	ACRONTOS MFG
Facility address:	16131 GOTHARD STREET STE L HUNTINGTON BEACH, CA 92647
EPA ID:	CAD094124112
Contact:	NGOL HOANG
Contact address:	16131 GOTHARD STREET STE L HUNTINGTON BEACH, CA 92647
Contact country:	US
Contact telephone:	(714) 375-2570
Contact email:	Not reported
EPA Region:	09
Land type:	Private
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous

ACRONTOS MFG (Continued) **1000198148**

waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
- Owner/operator name: NEOL HOANG
- Owner/operator address: 16131 GOTHARD L
  HUNTINGTON BCH, CA 92647
- Owner/operator country: Not reported
- Owner/operator telephone: (714) 375-2570
- Legal status: Private
- Owner/Operator Type: Owner
- Owner/Op start date: Not reported
- Owner/Op end date: Not reported

- Owner/operator name: NOT REQUIRED
- Owner/operator address: NOT REQUIRED
  NOT REQUIRED, ME 99999
- Owner/operator country: Not reported
- Owner/operator telephone: (415) 555-1212
- Legal status: Private
- Owner/Operator Type: Operator
- Owner/Op start date: Not reported
- Owner/Op end date: Not reported

Handler Activities Summary:
- U.S. importer of hazardous waste: No
- Mixed waste (haz. and radioactive): No
- Recycler of hazardous waste: No
- Transporter of hazardous waste: No
- Treater, storer or disposer of HW: No
- Underground injection activity: No
- On-site burner exemption: No
- Furnace exemption: No
- Used oil fuel burner: No
- Used oil processor: No
- User oil refiner: No
- Used oil fuel marketer to burner: No
- Used oil Specification marketer: No
- Used oil transfer facility: No
- Used oil transporter: No

Facility Has Received Notices of Violations:
- Regulation violated: Not reported
- Area of violation: Generators - General
- Date violation determined: 05/15/2006
- Date achieved compliance: 05/25/2006
- Violation lead agency: State
  - Enforcement action: WRITTEN INFORMAL
  - Enforcement action date: 05/15/2006
  - Enf. disposition status: Not reported
  - Enf. disp. status date: Not reported
  - Enforcement lead agency: State
  - Proposed penalty amount: Not reported
  - Final penalty amount: Not reported
  - Paid penalty amount: Not reported

ACRONTOS MFG (Continued) **1000198148**

Evaluation Action Summary:
Evaluation date: 05/15/2006
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 05/25/2006
Evaluation lead agency: Local

FINDS:

Registry ID: 110002664297

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

O65 **EDR US Hist Auto Stat** **1015255398**
SSE **16131 GOTHARD ST** **N/A**
1/8-1/4 **HUNTINGTON BEACH, CA 92647**
0.207 mi.
1095 ft. **Site 2 of 9 in cluster O**

Relative:
Lower

Actual:
19 ft.

EDR Historical Auto Stations:
Name: CONTEMPORARY AUTO MACHINE
Year: 1999
Address: 16131 GOTHARD ST

Name: CONTEMPORARY AUTO MACHINE
Year: 2001
Address: 16131 GOTHARD ST

Name: CONTEMPORARY AUTO MACHINE
Year: 2002
Address: 16131 GOTHARD ST

Name: CONTEMPORARY AUTO MACHINE
Year: 2003
Address: 16131 GOTHARD ST

Name: CONTEMPORARY AUTO MACHINE
Year: 2005
Address: 16131 GOTHARD ST

Name: CONTEMPORARY AUTO MACHINE
Year: 2006
Address: 16131 GOTHARD ST

Name: CONTEMPORARY AUTO MACHINE
Year: 2007
Address: 16131 GOTHARD ST

Name: CONTEMPORARY AUTO MACHINE
Year: 2008
Address: 16131 GOTHARD ST

(Continued) **1015255398**

Name: CONTEMPORARY AUTO MACHINE
Year: 2009
Address: 16131 GOTHARD ST

Name: CONTEMPORARY AUTO MACHINE
Year: 2010
Address: 16131 GOTHARD ST

Name: CONTEMPORARY AUTO MACHINE
Year: 2011
Address: 16131 GOTHARD ST

Name: CONTEMPORARY AUTO MACHINE
Year: 2012
Address: 16131 GOTHARD ST

M66 **EDR US Hist Auto Stat** **1015253648**
SW **16041 MARJAN LN** **N/A**
1/8-1/4 **HUNTINGTON BEACH, CA 92647**
0.212 mi.
1117 ft. **Site 3 of 3 in cluster M**

Relative:
Lower

Actual:
16 ft.

EDR Historical Auto Stations:
Name: MOBILE ULTRASOUND IMAGING SRVC
Year: 2006
Address: 16041 MARJAN LN

O67 **ANO-D-ART** **CERC-NFRAP** **1000138740**
SSE **7436 LORGE CIR** **RCRA-SQG** **CAD063113336**
1/8-1/4 **HUNTINGTON BEACH, CA 92647** **FINDS**
0.212 mi. **CA HIST UST**
1120 ft. **Site 3 of 9 in cluster O**

Relative:
Lower

Actual:
20 ft.

CERC-NFRAP:
Site ID: 0901492
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL
Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Site Contact Details:
Contact Sequence ID: 13052516.00000
Person ID: 9271184.00000

Contact Sequence ID: 13285534.00000
Person ID: 13003854.00000

Contact Sequence ID: 13291129.00000
Person ID: 13003858.00000

Contact Sequence ID: 13296987.00000
Person ID: 13004003.00000

CERCLIS-NFRAP Assessment History:
Action: DISCOVERY
Date Started: / /

ANO-D-ART (Continued) **1000138740**

Date Completed: 05/01/81
Priority Level: Not reported

Action: ARCHIVE SITE
Date Started: / /
Date Completed: 10/01/85
Priority Level: Not reported

Action: PRELIMINARY ASSESSMENT
Date Started: 02/01/85
Date Completed: 10/01/85
Priority Level: NFRAP-Site does not qualify for the NPL based on existing information

RCRA-SQG:
Date form received by agency: 09/01/1996
Facility name: ANO D ART
Facility address: 7436 LORGE CIR
HUNTINGTON BEACH, CA 92647
EPA ID: CAD063113336
Mailing address: 7436 LORGE CIRCLE
HUNTINGTN BCH, CA 92647
Contact: Not reported
Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: DAN KAVANAUGH
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

ANO-D-ART (Continued) **1000138740**

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 08/20/1980
Facility name: ANO D ART
Classification: Large Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110002653343

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HIST UST:
Region: STATE
Facility ID: 00000048671
Facility Type: Other
Other Type: ANODIZING
Total Tanks: 0001
Contact Name: BILL STUBBS
Telephone: 7148428891
Owner Name: ANO D' ART INC.
Owner Address: 7436 LORGE CIRCLE
Owner City,St,Zip: HUNTINGTON BEACH, CA 92647

Tank Num: 001
Container Num: 100/AB
Year Installed: 1972
Tank Capacity: 00000492
Tank Used for: WASTE
Type of Fuel: Not reported
Tank Construction: Not reported

ANO-D-ART (Continued) **1000138740**

Leak Detection: Visual

O68 **EDR US Hist Auto Stat** **1015623599**
SSE **7451 LORGE CIR** **N/A**
1/8-1/4 **HUNTINGTON BEACH, CA 92647**
0.220 mi.
1159 ft. **Site 4 of 9 in cluster O**

Relative:
Lower

EDR Historical Auto Stations:

Actual:
21 ft.

Name: INTERNATIONAL MOTORSPORT
Year: 2007
Address: 7451 LORGE CIR

Name: INTERNATIONAL MOTORSPORT
Year: 2009
Address: 7451 LORGE CIR

N69 **EDR US Hist Cleaners** **1014997519**
NNW **15254 GOLDENWEST ST** **N/A**
1/8-1/4 **WESTMINSTER, CA 92683**
0.227 mi.
1201 ft. **Site 2 of 4 in cluster N**

Relative:
Higher

EDR Historical Cleaners:

Actual:
25 ft.

Name: VALUE CLEANERS
Year: 1999
Address: 15254 GOLDENWEST ST

Name: VALUE CLEANERS
Year: 2001
Address: 15254 GOLDENWEST ST

Name: VALUE 1 HR CLEANERS
Year: 2002
Address: 15254 GOLDENWEST ST

Name: VALUE CLEANERS
Year: 2003
Address: 15254 GOLDENWEST ST

Name: VALUE ONE HOUR CLEANERS
Year: 2004
Address: 15254 GOLDENWEST ST

Name: VALUE CLEANERS
Year: 2010
Address: 15254 GOLDENWEST ST

Name: VALUE CLEANERS
Year: 2011
Address: 15254 GOLDENWEST ST

Name: VALUE CLEANERS
Year: 2012
Address: 15254 GOLDENWEST ST

N70 **VALUE ONE HOUR CLEANERS** **CA DRYCLEANERS** **S106842029**
NNW **15254 GOLDENWEST ST** **CA EMI** **N/A**
1/8-1/4 **WESTMINSTER, CA 92683**
0.227 mi.
1201 ft. **Site 3 of 4 in cluster N**

Relative:
Higher

Actual:
25 ft.

DRYCLEANERS:

EPA Id:	CAD981579675
NAICS Code:	81232
NAICS Description:	Drycleaning and Laundry Services (except Coin-Operated)
SIC Code:	7211
SIC Description:	Power Laundries, Family and Commercial
Create Date:	04/10/1987
Facility Active:	No
Inactive Date:	07/06/2005
Facility Addr2:	Not reported
Owner Name:	GORYUN & VERA ARTINIAN
Owner Address:	15254 GOLDENWEST ST
Owner Address 2:	Not reported
Owner Telephone:	7148941800
Contact Name:	HERMAN ARTINIAN/MANAGER
Contact Address:	15254 GOLDENWEST STREET
Contact Address 2:	Not reported
Contact Telephone:	7148941800
EDR Link ID:	CAD981579675

EMI:

Year:	1990
County Code:	30
Air Basin:	SC
Facility ID:	61186
Air District Name:	SC
SIC Code:	7216
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	2
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1995
County Code:	30
Air Basin:	SC
Facility ID:	61186
Air District Name:	SC
SIC Code:	7216
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0

VALUE ONE HOUR CLEANERS (Continued) **S106842029**

Part. Matter 10 Micrometers & Smllr Tons/Yr: 0

N71 **VALUE ONE HOUR CLEANERS** **RCRA-SQG** **1000424553**
NNW **15254 GOLDEN WEST AVE** **FINDS** **CAD981579675**
1/8-1/4 **WESTMINSTER, CA 92683** **CA EMI**
0.227 mi.
1201 ft. **Site 4 of 4 in cluster N**

Relative: Higher

Actual: 25 ft.

RCRA-SQG:

Date form received by agency:	09/01/1996
Facility name:	VALUE ONE HOUR CLEANERS
Facility address:	15254 GOLDEN WEST AVE WESTMINSTER, CA 92683
EPA ID:	CAD981579675
Mailing address:	GOLDEN WEST AVE WESTMINSTER, CA 92683
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	09
Land type:	Facility is not located on Indian land. Additional information is not known.
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	GORYUN ARTINIAN
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No

VALUE ONE HOUR CLEANERS (Continued) **1000424553**

Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

Evaluation Action Summary:
Evaluation date: 05/31/1994
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State Contractor/Grantee

FINDS:

Registry ID: 110002721868

Environmental Interest/Information System

The NEI (National Emissions Inventory) database contains information on stationary and mobile sources that emit criteria air pollutants and their precursors, as well as hazardous air pollutants (HAPs).

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

CRITERIA AND HAZARDOUS AIR POLLUTANT INVENTORY

EMI:
Year: 1987
County Code: 30
Air Basin: SC
Facility ID: 40753
Air District Name: SC
SIC Code: 7216
Air District Name: SOUTH COAST AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 1
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers & Smllr Tons/Yr: 0

P72 **VAN/DE PUBLISHING CO** **RCRA-SQG** **1000141220**
SSE **7301 MURDY CIRCLE** **FINDS** **CAD063109318**
1/8-1/4 **HUNTINGTON BEACH, CA**
0.231 mi.
1219 ft. **Site 1 of 3 in cluster P**

Relative:
Lower

Actual:
18 ft.

RCRA-SQG:

Date form received by agency:	09/01/1996
Facility name:	VAN/DE PUBLISHING CO
Facility address:	7301 MURDY CIRCLE HUNTINGTON BEACH, CA 92647
EPA ID:	CAD063109318
Mailing address:	16161 GOTHARD ST HUNTINGTON BC, CA 92647
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	VAN/DE PUBLIHING COMPANY INC
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No

VAN/DE PUBLISHING CO (Continued) **1000141220**

Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	08/18/1980
Facility name:	VAN/DE PUBLISHING CO
Classification:	Large Quantity Generator
Violation Status:	No violations found

FINDS:

Registry ID: 110002653325

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

P73 **TECSTOR, INC** **RCRA-SQG 1000389899**
SSE **7305 MURDY CIRCLE** **FINDS CAD981447360**
1/8-1/4 **HUNTINGTON BEACH, CA 92647**
0.231 mi.
1222 ft. **Site 2 of 3 in cluster P**

Relative:
Lower

Actual:
18 ft.

RCRA-SQG:

Date form received by agency:	09/01/1996
Facility name:	TECSTOR, INC
Facility address:	7305 MURDY CIRCLE HUNTINGTON BEACH, CA 92647
EPA ID:	CAD981447360
Mailing address:	16161 GOTHARD ST HUNTINGTON BEACH, CA 92647
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

TECSTOR, INC (Continued) **1000389899**

Owner/operator name: TECSTOR, INC
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 02/27/1986
Facility name: TECSTOR, INC
Classification: Large Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110002710264

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

O74
SSE
1/8-1/4
0.237 mi.
1250 ft.
Relative:
Lower
Actual:
19 ft.

16182 GOTHARD ST
HUNTINGTON BEACH, CA 92647

Site 5 of 9 in cluster O

EDR US Hist Auto Stat **1015256131**
N/A

EDR Historical Auto Stations:

Name:	TIM DEAL TRANSMISSIONS
Year:	1999
Address:	16182 GOTHARD ST
Name:	ARW AUTO SERVICE
Year:	2001
Address:	16182 GOTHARD ST
Name:	TIM DEAL TRANSMISSIONS
Year:	2002
Address:	16182 GOTHARD ST
Name:	TIM DEAL TRANSMISSIONS
Year:	2003
Address:	16182 GOTHARD ST
Name:	TIM DEAL TRANSMISSIONS
Year:	2004
Address:	16182 GOTHARD ST
Name:	MITSUBISHI AUTO REPAIR
Year:	2005
Address:	16182 GOTHARD ST
Name:	MITSUBISHI AUTO REPAIR
Year:	2006
Address:	16182 GOTHARD ST

O75
SSE
1/8-1/4
0.237 mi.
1250 ft.
Relative:
Lower
Actual:
19 ft.

16182 GOTHARD ST
HUNTINGTON BEACH, CA 92647

Site 6 of 9 in cluster O

EDR US Hist Cleaners **1015000899**
N/A

EDR Historical Cleaners:

Name:	PREMIER SUEDE & LEATHER CLEANERS
Year:	2012
Address:	16182 GOTHARD ST

O76
SSE
1/8-1/4
0.237 mi.
1250 ft.
Relative:
Lower
Actual:
19 ft.

CARTERS GEAR BOX SHOP
16182 GOTHARD UNIT J
HUNTINGTON BEACH, CA 92647

Site 7 of 9 in cluster O

RCRA NonGen / NLR **1000686649**
CA HAZNET **CAD983639980**

RCRA NonGen / NLR:

Date form received by agency:	09/14/1994
Facility name:	CARTERS GEAR BOX SHOP
Facility address:	16182 GOTHARD UNIT J HUNTINGTON BEACH, CA 92647
EPA ID:	CAD983639980

CARTERS GEAR BOX SHOP (Continued) **1000686649**

Mailing address: GOTHARD UNIT J
HUNTINGTON BEACH, CA 92647
Contact: GLYNIS CARTER
Contact address: 16182 GOTHARD UNIT J
HUNTINGTON BEACH, CA 92647
Contact country: US
Contact telephone: (714) 375-2689
Contact email: Not reported
EPA Region: 09
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: HAROLD CARTER
Owner/operator address: 16182 GOTHARD UNIT J
HUNTINGTON BEACH, CA 92647
Owner/operator country: Not reported
Owner/operator telephone: (714) 375-2689
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

HAZNET:
Year: 1995
Gepaid: CAD983639980
Contact: HAROLD CARTER
Telephone: 7143752689
Mailing Name: Not reported
Mailing Address: 16182 GOTHARD UNIT J
Mailing City,St,Zip: HUNTINGTON BEACH, CA 926470000
Gen County: Not reported
TSD EPA ID: CAD000088252
TSD County: Not reported
Waste Category: Other organic solids
Disposal Method: Transfer Station
Tons: .2000
Facility County: Orange

CARTERS GEAR BOX SHOP (Continued) **1000686649**

Year:	1995
Gepaid:	CAD983639980
Contact:	HAROLD CARTER
Telephone:	7143752689
Mailing Name:	Not reported
Mailing Address:	16182 GOTHARD UNIT J
Mailing City,St,Zip:	HUNTINGTON BEACH, CA 926470000
Gen County:	Not reported
TSD EPA ID:	CAT080022148
TSD County:	Not reported
Waste Category:	Other organic solids
Disposal Method:	Transfer Station
Tons:	.2000
Facility County:	Orange

Year:	1994
Gepaid:	CAD983639980
Contact:	HAROLD CARTER
Telephone:	7143752689
Mailing Name:	Not reported
Mailing Address:	16182 GOTHARD UNIT J
Mailing City,St,Zip:	HUNTINGTON BEACH, CA 926470000
Gen County:	Not reported
TSD EPA ID:	CAD000088252
TSD County:	Not reported
Waste Category:	Unspecified oil-containing waste
Disposal Method:	Transfer Station
Tons:	.7000
Facility County:	Orange

Year:	1993
Gepaid:	CAD983639980
Contact:	HAROLD CARTER
Telephone:	7143752689
Mailing Name:	Not reported
Mailing Address:	16182 GOTHARD UNIT J
Mailing City,St,Zip:	HUNTINGTON BEACH, CA 926470000
Gen County:	Not reported
TSD EPA ID:	CAD099452708
TSD County:	Not reported
Waste Category:	Waste oil and mixed oil
Disposal Method:	Recycler
Tons:	0.54200000000
Facility County:	Orange

Year:	1993
Gepaid:	CAD983639980
Contact:	HAROLD CARTER
Telephone:	7143752689
Mailing Name:	Not reported
Mailing Address:	16182 GOTHARD UNIT J
Mailing City,St,Zip:	HUNTINGTON BEACH, CA 926470000
Gen County:	Not reported
TSD EPA ID:	CAD000088252
TSD County:	Not reported
Waste Category:	Unspecified oil-containing waste
Disposal Method:	Transfer Station

CARTERS GEAR BOX SHOP (Continued) **1000686649**

Tons: 1.2
Facility County: Orange

Click this hyperlink while viewing on your computer to access
1 additional CA_HAZNET: record(s) in the EDR Site Report.

O77 **COAST AUTOBODY & PAINT, INC** **RCRA-SQG** **1000386998**
SSE **16182 GOTHARD ST** **FINDS** **CAD981161722**
1/8-1/4 **HUNTINGTON BEACH, CA 92647** **CA HAZNET**
0.237 mi.
1250 ft. **Site 8 of 9 in cluster O**

Relative:
Lower

Actual:
19 ft.

RCRA-SQG:
Date form received by agency: 09/01/1996
Facility name: COAST AUTOBODY & PAINT, INC
Facility address: 16182 GOTHARD ST
HUNTINGTON BEACH, CA 92647
EPA ID: CAD981161722
Mailing address: GOTHARD ST
HUNTINGTON BEACH, CA 92647
Contact: Not reported
Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: DICK FELLOWS
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No

COAST AUTOBODY & PAINT, INC (Continued) **1000386998**

Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110002678852

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HAZNET:

Year: 1998
Gepaid: CAD981161722
Contact: Not reported
Telephone: 0000000000
Mailing Name: Not reported
Mailing Address: 16182 GOTHARD ST
Mailing City,St,Zip: HUNTINGTON BEACH, CA 926470000
Gen County: Not reported
TSD EPA ID: CAD008252405
TSD County: Not reported
Waste Category: Aqueous solution with total organic residues 10 percent or more
Disposal Method: Recycler
Tons: .1709
Facility County: Orange

Year: 1996
Gepaid: CAD981161722
Contact: Not reported
Telephone: 0000000000
Mailing Name: Not reported
Mailing Address: 16182 GOTHARD ST
Mailing City,St,Zip: HUNTINGTON BEACH, CA 926470000
Gen County: Not reported
TSD EPA ID: CAD008252405
TSD County: Not reported
Waste Category: Aqueous solution with total organic residues 10 percent or more

COAST AUTOBODY & PAINT, INC (Continued) **1000386998**

Disposal Method: Recycler
Tons: .0667
Facility County: Orange

Year: 1995
Gepaid: CAD981161722
Contact: Not reported
Telephone: 0000000000
Mailing Name: Not reported
Mailing Address: 16182 GOTHARD ST
Mailing City,St,Zip: HUNTINGTON BEACH, CA 926470000
Gen County: Not reported
TSD EPA ID: CAD008302903
TSD County: Not reported
Waste Category: Paint sludge
Disposal Method: Recycler
Tons: .1668
Facility County: Orange

Year: 1995
Gepaid: CAD981161722
Contact: Not reported
Telephone: 0000000000
Mailing Name: Not reported
Mailing Address: 16182 GOTHARD ST
Mailing City,St,Zip: HUNTINGTON BEACH, CA 926470000
Gen County: Not reported
TSD EPA ID: CAD008252405
TSD County: Not reported
Waste Category: Not reported
Disposal Method: Recycler
Tons: .0000
Facility County: Orange

Year: 1995
Gepaid: CAD981161722
Contact: Not reported
Telephone: 0000000000
Mailing Name: Not reported
Mailing Address: 16182 GOTHARD ST
Mailing City,St,Zip: HUNTINGTON BEACH, CA 926470000
Gen County: Not reported
TSD EPA ID: CAD008252405
TSD County: Not reported
Waste Category: Unspecified solvent mixture
Disposal Method: Recycler
Tons: .2960
Facility County: Orange

Click this hyperlink while viewing on your computer to access
2 additional CA_HAZNET: record(s) in the EDR Site Report.

O78 **MIKE'S PAINT & RESTORATION** **RCRA-SQG** **1000199449**
SSE **16182 GOTHARD ST, STE M** **FINDS** **CAD981163504**
1/8-1/4 **HUNTINGTON BEACH, CA**
0.237 mi.
1250 ft. **Site 9 of 9 in cluster O**

Relative:
Lower

Actual:
19 ft.

RCRA-SQG:

Date form received by agency:	09/01/1996
Facility name:	MIKE'S PAINT & RESTORATION
Facility address:	16182 GOTHARD ST, STE M HUNTINGTON BEACH, CA 92647
EPA ID:	CAD981163504
Mailing address:	GOTHARD ST, STE M HUNTINGTON BEACH, CA 92647
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	Not reported
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	MIKE LAYNE
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No

MIKE'S PAINT & RESTORATION (Continued) **1000199449**

Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110009534076

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

P79 **MURDY FIRE STATION** **CA HIST CORTESE** **U002096222**
SSE **16221 GOTHARD ST** **CA LUST** **N/A**
1/4-1/2 **HUNTINGTON BEACH, CA 92648** **CA HIST UST**
0.267 mi. **CA SWEEPS UST**
1410 ft. **Site 3 of 3 in cluster P**

Relative: Lower

Actual: 18 ft.

CORTESE:
Region: CORTESE
Facility County Code: 30
Reg By: LTNKA
Reg Id: 083001760T

LUST:
Region: STATE
Global Id: T0605901324
Latitude: 33.726752
Longitude: -118.000709
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 04/14/1993
Lead Agency: ORANGE COUNTY LOP
Case Worker: GH
Local Agency: ORANGE COUNTY LOP
RB Case Number: 083001760T
LOC Case Number: 92UT143
File Location: Local Agency
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:
Global Id: T0605901324
Contact Type: Local Agency Caseworker

MURDY FIRE STATION (Continued) **U002096222**

Contact Name: GENIECE HIGGINS
Organization Name: ORANGE COUNTY LOP
Address: 1241 EAST DYER ROAD SUITE 120
City: SANTA ANA
Email: ghiggins@ochca.com
Phone Number: 7144336260

Global Id: T0605901324
Contact Type: Regional Board Caseworker
Contact Name: ROSE SCOTT
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 MAIN STREET, SUITE 500
City: RIVERSIDE
Email: rscott@waterboards.ca.gov
Phone Number: 9513206375

Status History:
Global Id: T0605901324
Status: Completed - Case Closed
Status Date: 04/14/1993

Global Id: T0605901324
Status: Open - Case Begin Date
Status Date: 12/16/1992

Regulatory Activities:
Global Id: T0605901324
Action Type: Other
Date: 01/01/1950
Action: Leak Reported

Global Id: T0605901324
Action Type: Other
Date: 01/01/1950
Action: Leak Discovery

Global Id: T0605901324
Action Type: REMEDIATION
Date: 01/01/1950
Action: Excavation

Region: STATE
Global Id: T0605980962
Latitude: 33.726742
Longitude: -118.000799
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 09/28/1992
Lead Agency: ORANGE COUNTY LOP
Case Worker: GH
Local Agency: ORANGE COUNTY LOP
RB Case Number: Not reported
LOC Case Number: 91UT014
File Location: Local Agency
Potential Media Affect: Other Groundwater (uses other than drinking water)

MURDY FIRE STATION (Continued) **U002096222**

Potential Contaminants of Concern: Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:
Global Id: T0605980962
Contact Type: Local Agency Caseworker
Contact Name: GENIECE HIGGINS
Organization Name: ORANGE COUNTY LOP
Address: 1241 EAST DYER ROAD SUITE 120
City: SANTA ANA
Email: ghiggins@ochca.com
Phone Number: 7144336260

Global Id: T0605980962
Contact Type: Regional Board Caseworker
Contact Name: TOM E. MBEKE-EKANEM
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 MAIN STREET, SUITE 500
City: RIVERSIDE
Email: tmbeke-ekanem@waterboards.ca.gov
Phone Number: 9513202007

Status History:
Global Id: T0605980962
Status: Completed - Case Closed
Status Date: 09/28/1992

Global Id: T0605980962
Status: Open - Case Begin Date
Status Date: 11/13/1990

Regulatory Activities:
Global Id: T0605980962
Action Type: Other
Date: 01/01/1950
Action: Leak Reported

Global Id: T0605980962
Action Type: REMEDIATION
Date: 01/01/1950
Action: Excavation

Global Id: T0605980962
Action Type: Other
Date: 01/01/1950
Action: Leak Discovery

ORANGE CO. LUST:
Region: ORANGE
Facility Id: 92UT143
Current Status: Certification (Case Closed)
Released Substance: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed: 04/14/1993

MURDY FIRE STATION (Continued) **U002096222**

Case Type: Other Ground Water
Record ID: RO0000902

Region: ORANGE
Facility Id: 91UT014
Current Status: Certification (Case Closed)
Released Substance: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed: 09/28/1992
Case Type: Other Ground Water
Record ID: RO0001153

LUST REG 8:
Region: 8
County: Orange
Regional Board: Santa Ana Region
Facility Status: Case Closed
Case Number: 083001760T
Local Case Num: 92UT143
Case Type: Other ground water affected
Substance: Gasoline
Qty Leaked: 0
Abate Method: Not reported
Cross Street: Not reported
Enf Type: Not reported
Funding: Not reported
How Discovered: Tank Closure
How Stopped: Close Tank
Leak Cause: Unknown
Leak Source: Unknown
Global ID: T0605901324
How Stopped Date: 9/9/9999
Enter Date: Not reported
Review Date: Not reported
Prelim Assess: Not reported
Discover Date: 12/16/1992
Enforcement Date: Not reported
Close Date: 4/14/1993
Workplan: Not reported
Pollution Char: Not reported
Remed Plan: Not reported
Remed Action: Not reported
Monitoring: Not reported
Enter Date: Not reported
GW Qualifies: Not reported
Soil Qualifies: Not reported
Operator: Not reported
Facility Contact: Not reported
Interim: Not reported
Oversite Program: LUST
Latitude: 33.7278061
Longitude: -118.0001963
MTBE Date: Not reported
Max MTBE GW: Not reported
MTBE Concentration: 0
Max MTBE Soil: Not reported
MTBE Fuel: 1
MTBE Tested: Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.

MURDY FIRE STATION (Continued) **U002096222**

MTBE Class:	*
Staff:	RS
Staff Initials:	AR
Lead Agency:	Local Agency
Local Agency:	30000L
Hydr Basin #:	Not reported
Beneficial:	MUN
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	Not reported
Local Case Num:	91UT014
Case Type:	Other ground water affected
Substance:	Gasoline
Qty Leaked:	0
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Close Tank
Leak Cause:	Unknown
Leak Source:	Unknown
Global ID:	T0605980962
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Review Date:	Not reported
Prelim Assess:	Not reported
Discover Date:	11/13/1990
Enforcement Date:	Not reported
Close Date:	9/28/1992
Workplan:	Not reported
Pollution Char:	Not reported
Remed Plan:	Not reported
Remed Action:	Not reported
Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	Not reported
Longitude:	Not reported
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.

MURDY FIRE STATION (Continued) **U002096222**

MTBE Class: *
Staff: TME
Staff Initials: AR
Lead Agency: Local Agency
Local Agency: 30000L
Hydr Basin #: Not reported
Beneficial: MUN
Priority: Not reported
Cleanup Fund Id: Not reported
Work Suspended: Not reported
Summary: Not reported

HIST UST:
Region: STATE
Facility ID: 00000027867
Facility Type: Other
Other Type: Not reported
Total Tanks: 0002
Contact Name: TOM SHAW
Telephone: 7145365411
Owner Name: CITY OF HUNTINGTON BEACH
Owner Address: 2000 MAIN
Owner City,St,Zip: HUNTINGTON BEACH, CA 29648

Tank Num: 001
Container Num: M-1
Year Installed: 1971
Tank Capacity: 00001500
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Tank Construction: 3/16 inches
Leak Detection: None

Tank Num: 002
Container Num: M-2
Year Installed: 1971
Tank Capacity: 00001500
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Tank Construction: 3/16 inches
Leak Detection: None

SWEEPS UST:
Status: Not reported
Comp Number: 5954
Number: Not reported
Board Of Equalization: 44-016401
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Tank Status: Not reported
Owner Tank Id: Not reported
Swrcb Tank Id: 30-000-005954-000002
Actv Date: Not reported
Capacity: 1500
Tank Use: UNKNOWN

MURDY FIRE STATION (Continued) **U002096222**

Stg:	PRODUCT
Content:	Not reported
Number Of Tanks:	1
Status:	Active
Comp Number:	5954
Number:	9
Board Of Equalization:	44-016401
Referral Date:	09-30-92
Action Date:	09-15-92
Created Date:	02-29-88
Tank Status:	A
Owner Tank Id:	Not reported
Swrcb Tank Id:	30-000-005954-000001
Actv Date:	Not reported
Capacity:	1500
Tank Use:	M.V. FUEL
Stg:	P
Content:	REG UNLEADED
Number Of Tanks:	1

Q80
ESE
1/4-1/2
0.326 mi.
1722 ft.

THE CLEANING FACTORY **CA SLIC** **S108985887**
7644 EDINGER AVENUE **N/A**
HUNTINGTON BEACH, CA

Site 1 of 9 in cluster Q

Relative:
Higher

Actual:
25 ft.

SLIC REG 8:

Type:	Soil and Groundwater
Facility Status:	Closed
Region:	8
Staff:	WDM
Substance:	WDM
Lead Agency:	WDM
Location Code:	WDM
Thomas Bros Code:	WDM

81
SSE
1/4-1/2
0.331 mi.
1747 ft.

FAR WEST FIR CORP **CA NPDES** **S103634412**
16300 GOTHARD ST **CA HIST CORTESE** **N/A**
HUNTINGTON BEACH, CA 92647 **CA LUST**

Relative:
Lower

Actual:
18 ft.

NPDES:

Npdes Number:	CAS000001
Facility Status:	Active
Agency Id:	0
Region:	8
Regulatory Measure Id:	289035
Order No:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place Id:	Not reported
WDID:	8 30I019956
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	11/29/2005

FAR WEST FIR CORP (Continued) **S103634412**

Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	United Rentals North America Inc
Discharge Address:	791 E 64th Ave
Discharge City:	Denver
Discharge State:	Colorado
Discharge Zip:	80229

CORTESE:

Region:	CORTESE
Facility County Code:	30
Reg By:	LTNKA
Reg Id:	083000153T

LUST:

Region:	STATE
Global Id:	T0605900116
Latitude:	33.7271923
Longitude:	-118.0002035
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	07/24/1985
Lead Agency:	ORANGE COUNTY LOP
Case Worker:	GH
Local Agency:	ORANGE COUNTY LOP
RB Case Number:	083000153T
LOC Case Number:	84UT032
File Location:	Local Agency
Potential Media Affect:	Under Investigation
Potential Contaminants of Concern:	Diesel, Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0605900116
Contact Type:	Regional Board Caseworker
Contact Name:	PATRICIA HANNON
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500
City:	RIVERSIDE
Email:	phannon@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0605900116
Contact Type:	Local Agency Caseworker
Contact Name:	GENIECE HIGGINS
Organization Name:	ORANGE COUNTY LOP
Address:	1241 EAST DYER ROAD SUITE 120
City:	SANTA ANA
Email:	ghiggins@ochca.com
Phone Number:	7144336260

Status History:

Global Id:	T0605900116
Status:	Completed - Case Closed

FAR WEST FIR CORP (Continued) **S103634412**

Status Date: 07/24/1985

Global Id: T0605900116
Status: Open - Case Begin Date
Status Date: 07/24/1985

ORANGE CO. LUST:
Region: ORANGE
Facility Id: 84UT032
Current Status: Certification (Case Closed)
Released Substance: Diesel fuel oil and additives, Nos.1-D, 2-D, 2-4
Date Closed: 07/24/1985
Case Type: Undetermined
Record ID: RO0001455

Region: ORANGE
Facility Id: 84UT032
Current Status: Not reported
Released Substance: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed: 07/24/1985
Case Type: Not reported
Record ID: RO0001455

LUST REG 8:
Region: 8
County: Orange
Regional Board: Santa Ana Region
Facility Status: Case Closed
Case Number: 083000153T
Local Case Num: 84UT032
Case Type: Undefined
Substance: 12034,800661
Qty Leaked: 0
Abate Method: Not reported
Cross Street: Not reported
Enf Type: Not reported
Funding: Not reported
How Discovered: Tank Closure
How Stopped: Close Tank
Leak Cause: Unknown
Leak Source: Unknown
Global ID: T0605900116
How Stopped Date: 9/9/9999
Enter Date: Not reported
Review Date: Not reported
Prelim Assess: Not reported
Discover Date: 1/1/1965
Enforcement Date: Not reported
Close Date: 7/24/1985
Workplan: Not reported
Pollution Char: Not reported
Remed Plan: Not reported
Remed Action: Not reported
Monitoring: Not reported
Enter Date: Not reported

FAR WEST FIR CORP (Continued) **S103634412**

GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.7272691
Longitude:	-117.9999213
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	0
MTBE Tested:	Not Required to be Tested.
MTBE Class:	*
Staff:	PAH
Staff Initials:	AR
Lead Agency:	Local Agency
Local Agency:	30000L
Hydr Basin #:	Not reported
Beneficial:	MUN
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported

Summary: Not reported

Q82 **CLEANING FACTORY THE** **RCRA-SQG** **1000152631**
ESE **7664 EDINGER AVE** **FINDS** **CAD982001414**
1/4-1/2 **HUNTINGTON BEACH, CA** **CA SLIC**
0.347 mi. **CA Orange Co. Industrial Site**
1832 ft. **Site 2 of 9 in cluster Q** **CA HAZNET**
CA EMI

Relative:
Higher

Actual:
25 ft.

RCRA-SQG:

Date form received by agency:	06/15/1987
Facility name:	CLEANING FACTORY THE
Facility address:	7664 EDINGER AVE HUNTINGTON BEACH, CA 92647
EPA ID:	CAD982001414
Contact:	YOUNG HOON CHANG
Contact address:	7664 EDINGER AVE HUNTINGTON BEACH, CA 92647
Contact country:	US
Contact telephone:	(714) 842-9940
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999

CLEANING FACTORY THE (Continued) **1000152631**

Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: YOUNG HOON CHANG
Owner/operator address: 7664 EDINGER AVE
HUNTINGTON BEACH, CA 92647
Owner/operator country: Not reported
Owner/operator telephone: (714) 842-9940
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110002772660

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

SLIC:
Region: STATE
Facility Status: **Completed - Case Closed**
Status Date: 10/27/2000
Global Id: SL208423897
Lead Agency: SANTA ANA RWQCB (REGION 8)
Lead Agency Case Number: Not reported
Latitude: 33.7289529199356

CLEANING FACTORY THE (Continued) **1000152631**

Longitude:	-117.994891405106
Case Type:	Cleanup Program Site
Case Worker:	WDM
Local Agency:	Not reported
RB Case Number:	SL208423897
File Location:	Regional Board
Potential Media Affected:	Other Groundwater (uses other than drinking water), Soil
Potential Contaminants of Concern:	Tetrachloroethylene (PCE)
Site History:	Remediated Soil is still in a Stockpile on-site; A Second verification sampling will be conducted before disposal. 3 Monitoring wells will be installed for shallow groundwater, while 2 hydropunch events (4) will be used for confined perched GW layer

Click here to access the California GeoTracker records for this facility:

Orange Co. Industrial Site:

Case ID:	96IC047
Region:	ORANGE
Record ID:	RO0000570
Current Status:	CLOSED 9/21/2001
Closure Type:	Voluntary Cleanup Program Termination
Released Chemical:	PERCHLOROETHYLENE TRICHLOROETHYLENE

HAZNET:

Year:	1999
Gepaid:	CAD982001414
Contact:	Not reported
Telephone:	0000000000
Mailing Name:	Not reported
Mailing Address:	7664 EDINGER AVE
Mailing City,St,Zip:	HUNTINGTON BEACH, CA 926473605
Gen County:	Not reported
TSD EPA ID:	CAT000613976
TSD County:	Not reported
Waste Category:	Not reported
Disposal Method:	Transfer Station
Tons:	.0000
Facility County:	Orange

Year:	1999
Gepaid:	CAD982001414
Contact:	Not reported
Telephone:	0000000000
Mailing Name:	Not reported
Mailing Address:	7664 EDINGER AVE
Mailing City,St,Zip:	HUNTINGTON BEACH, CA 926473605
Gen County:	Not reported
TSD EPA ID:	CAT000613976
TSD County:	Not reported
Waste Category:	Liquids with halogenated organic compounds >= 1,000 Mg./L
Disposal Method:	Transfer Station
Tons:	1.2480
Facility County:	Orange

Year:	1998
Gepaid:	CAD982001414

CLEANING FACTORY THE (Continued) **1000152631**

Contact: Not reported
Telephone: 0000000000
Mailing Name: Not reported
Mailing Address: 7664 EDINGER AVE
Mailing City,St,Zip: HUNTINGTON BEACH, CA 926473605
Gen County: Not reported
TSD EPA ID: CAD981375983
TSD County: Not reported
Waste Category: Liquids with halogenated organic compounds >= 1,000 Mg./L
Disposal Method: Recycler
Tons: .0834
Facility County: Orange

Year: 1997
Gepaid: CAD982001414
Contact: Not reported
Telephone: 0000000000
Mailing Name: Not reported
Mailing Address: 7664 EDINGER AVE
Mailing City,St,Zip: HUNTINGTON BEACH, CA 926473605
Gen County: Not reported
TSD EPA ID: CAD981397417
TSD County: Not reported
Waste Category: Not reported
Disposal Method: Recycler
Tons: .0000
Facility County: Orange

Year: 1997
Gepaid: CAD982001414
Contact: Not reported
Telephone: 0000000000
Mailing Name: Not reported
Mailing Address: 7664 EDINGER AVE
Mailing City,St,Zip: HUNTINGTON BEACH, CA 926473605
Gen County: Not reported
TSD EPA ID: CAD981397417
TSD County: Not reported
Waste Category: Halogenated solvents (chloroforms, methyl chloride, perchloroethylene, etc)
Disposal Method: Recycler
Tons: .4214
Facility County: Orange

Click this hyperlink while viewing on your computer to access
2 additional CA_HAZNET: record(s) in the EDR Site Report.

EMI:
Year: 1987
County Code: 30
Air Basin: SC
Facility ID: 24741
Air District Name: SC
SIC Code: 7216
Air District Name: SOUTH COAST AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported

CLEANING FACTORY THE (Continued) **1000152631**

Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1990
County Code:	30
Air Basin:	SC
Facility ID:	71639
Air District Name:	SC
SIC Code:	7216
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Q83 **MONTGOMERY WARDS** **CA LUST** **S102433962**
ESE **7777 EDINGER AVE** **N/A**
1/4-1/2 **HUNTINGTON BEACH, CA 92647**
0.348 mi.
1838 ft. **Site 3 of 9 in cluster Q**

Relative:
Higher

Actual:
25 ft.

LUST REG 8:

Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Remedial action (cleanup) Underway
Case Number:	083000290T
Local Case Num:	86UT193
Case Type:	Other ground water affected
Substance:	Gasoline
Qty Leaked:	0
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	EDFNL
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Close Tank
Leak Cause:	Unknown
Leak Source:	Unknown
Global ID:	T0605900226
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Review Date:	Not reported
Prelim Assess:	Not reported
Discover Date:	10/8/1986
Enforcement Date:	Not reported
Close Date:	12/13/2004
Workplan:	Not reported

MONTGOMERY WARDS (Continued) **S102433962**

Pollution Char:	Not reported
Remed Plan:	Not reported
Remed Action:	1/1/1965
Monitoring:	5/5/2003
Enter Date:	Not reported
GW Qualifies:	=
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.7302521
Longitude:	-117.9932681
MTBE Date:	7/14/2003
Max MTBE GW:	2.3
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class:	*
Staff:	TME
Staff Initials:	KC
Lead Agency:	Local Agency
Local Agency:	30000L
Hydr Basin #:	Not reported
Beneficial:	MUN
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

Q84 **CHEVRON #9-8655** **CA HIST CORTESE** **S102005156**
ESE **7777 EDINGER** **CA LUST** **N/A**
1/4-1/2 **HUNTINGTON BEACH, CA 92647**
0.348 mi.
1838 ft. **Site 4 of 9 in cluster Q**

Relative:
Higher

Actual:
25 ft.

CORTESE:

Region:	CORTESE
Facility County Code:	30
Reg By:	LTNKA
Reg Id:	083002325T

LUST:

Region:	STATE
Global Id:	T0605900438
Latitude:	33.7306839431635
Longitude:	-117.994923591614
Case Type:	LUST Cleanup Site
Status:	Open - Site Assessment
Status Date:	03/26/2009
Lead Agency:	ORANGE COUNTY LOP
Case Worker:	TE
Local Agency:	ORANGE COUNTY LOP
RB Case Number:	083000549T
LOC Case Number:	84UT008
File Location:	Local Agency

CHEVRON #9-8655 (Continued) **S102005156**

Potential Media Affect: Aquifer used for drinking water supply
Potential Contaminants of Concern: Gasoline
Site History: Please refer to recent Site Documents or Monitoring Reports in GeoTracker for site history. Orange County is not responsible for the accuracy of any professional interpretations provided in reports submitted by consultants for the responsible party.

Click here to access the California GeoTracker records for this facility:

Contact:
Global Id: T0605900438
Contact Type: Regional Board Caseworker
Contact Name: TOM E. MBEKE-EKANEM
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 MAIN STREET, SUITE 500
City: RIVERSIDE
Email: tmbeke-ekanem@waterboards.ca.gov
Phone Number: 9513202007

Global Id: T0605900438
Contact Type: Local Agency Caseworker
Contact Name: TAMARA ESCOBEDO
Organization Name: ORANGE COUNTY LOP
Address: 1241 EAST DYER ROAD SUITE 120
City: SANTA ANA
Email: tescobedo@ochca.com
Phone Number: 7144336251

Status History:
Global Id: T0605900438
Status: Open - Case Begin Date
Status Date: 10/29/1984

Global Id: T0605900438
Status: Open - Site Assessment
Status Date: 03/26/2009

Global Id: T0605900438
Status: Open - Verification Monitoring
Status Date: 10/29/1984

Regulatory Activities:
Global Id: T0605900438
Action Type: ENFORCEMENT
Date: 02/22/2012
Action: Staff Letter

Global Id: T0605900438
Action Type: ENFORCEMENT
Date: 02/16/2012
Action: Staff Letter

Global Id: T0605900438
Action Type: ENFORCEMENT
Date: 04/05/2012
Action: Staff Letter

CHEVRON #9-8655 (Continued) **S102005156**

Global Id: T0605900438
Action Type: ENFORCEMENT
Date: 08/24/2012
Action: Staff Letter

Global Id: T0605900438
Action Type: ENFORCEMENT
Date: 04/16/2010
Action: Staff Letter

Global Id: T0605900438
Action Type: Other
Date: 01/01/1950
Action: Leak Began

Global Id: T0605900438
Action Type: REMEDIATION
Date: 01/01/1950
Action: Other (Use Description Field)

Global Id: T0605900438
Action Type: REMEDIATION
Date: 01/01/1950
Action: In Situ Physical/Chemical Treatment (other than SVE)

Global Id: T0605900438
Action Type: REMEDIATION
Date: 01/01/1950
Action: Excavation

Global Id: T0605900438
Action Type: ENFORCEMENT
Date: 07/26/2005
Action: Staff Letter

Global Id: T0605900438
Action Type: ENFORCEMENT
Date: 03/27/2006
Action: Staff Letter

Global Id: T0605900438
Action Type: ENFORCEMENT
Date: 06/02/2008
Action: Staff Letter

Global Id: T0605900438
Action Type: ENFORCEMENT
Date: 12/08/2006
Action: Staff Letter

Global Id: T0605900438
Action Type: ENFORCEMENT
Date: 01/10/2007
Action: * Verbal Communication

Global Id: T0605900438
Action Type: ENFORCEMENT

CHEVRON #9-8655 (Continued) **S102005156**

Date: 06/03/2008
Action: Staff Letter

Global Id: T0605900438
Action Type: ENFORCEMENT
Date: 09/20/2005
Action: * Verbal Communication

Global Id: T0605900438
Action Type: ENFORCEMENT
Date: 09/21/2005
Action: * Verbal Communication

Global Id: T0605900438
Action Type: ENFORCEMENT
Date: 08/02/2005
Action: * Verbal Communication

Global Id: T0605900438
Action Type: ENFORCEMENT
Date: 09/09/2005
Action: Staff Letter

Global Id: T0605900438
Action Type: ENFORCEMENT
Date: 04/24/2007
Action: Staff Letter

Global Id: T0605900438
Action Type: ENFORCEMENT
Date: 07/14/2010
Action: Staff Letter

Global Id: T0605900438
Action Type: RESPONSE
Date: 07/10/2013
Action: Request for Closure - Regulator Responded

Global Id: T0605900438
Action Type: Other
Date: 01/01/1950
Action: Leak Discovery

Global Id: T0605900438
Action Type: ENFORCEMENT
Date: 07/02/2009
Action: Staff Letter

Global Id: T0605900438
Action Type: ENFORCEMENT
Date: 05/11/2011
Action: Staff Letter

Global Id: T0605900438
Action Type: ENFORCEMENT
Date: 06/30/2009
Action: Staff Letter

CHEVRON #9-8655 (Continued) **S102005156**

Global Id: T0605900438
Action Type: ENFORCEMENT
Date: 06/29/2009
Action: Staff Letter

Global Id: T0605900438
Action Type: RESPONSE
Date: 08/13/2013
Action: Well Installation Workplan - Regulator Responded

Global Id: T0605900438
Action Type: ENFORCEMENT
Date: 09/13/2011
Action: Staff Letter

Global Id: T0605900438
Action Type: Other
Date: 01/01/1950
Action: Leak Reported

Global Id: T0605900438
Action Type: REMEDIATION
Date: 01/01/1950
Action: Pump & Treat (P&T) Groundwater

Global Id: T0605900438
Action Type: REMEDIATION
Date: 01/01/1950
Action: Excavation

Global Id: T0605900438
Action Type: REMEDIATION
Date: 01/01/1950
Action: In Situ Physical/Chemical Treatment (other than SVE)

Region: STATE
Global Id: T0605900226
Latitude: 33.7306571750288
Longitude: -117.997434139252
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 12/13/2004
Lead Agency: ORANGE COUNTY LOP
Case Worker: KC
Local Agency: ORANGE COUNTY LOP
RB Case Number: 083000290T
LOC Case Number: 86UT193
File Location: Local Agency
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:
Global Id: T0605900226
Contact Type: Local Agency Caseworker

CHEVRON #9-8655 (Continued) **S102005156**

Contact Name: GENIECE HIGGINS
Organization Name: ORANGE COUNTY LOP
Address: 1241 EAST DYER ROAD SUITE 120
City: SANTA ANA
Email: ghiggins@ochca.com
Phone Number: 7144336260

Global Id: T0605900226
Contact Type: Regional Board Caseworker
Contact Name: TOM E. MBEKE-EKANEM
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 MAIN STREET, SUITE 500
City: RIVERSIDE
Email: tmbeke-ekanem@waterboards.ca.gov
Phone Number: 9513202007

Status History:
Global Id: T0605900226
Status: Completed - Case Closed
Status Date: 12/13/2004

Global Id: T0605900226
Status: Open - Case Begin Date
Status Date: 10/08/1986

Global Id: T0605900226
Status: Open - Remediation
Status Date: 10/08/1986

Global Id: T0605900226
Status: Open - Verification Monitoring
Status Date: 05/05/2003

Regulatory Activities:
Global Id: T0605900226
Action Type: ENFORCEMENT
Date: 07/16/2004
Action: LOP Case Closure Summary to RB

Global Id: T0605900226
Action Type: ENFORCEMENT
Date: 07/19/2004
Action: Staff Letter

Global Id: T0605900226
Action Type: ENFORCEMENT
Date: 05/05/2003
Action: Staff Letter

Global Id: T0605900226
Action Type: Other
Date: 01/01/1950
Action: Leak Discovery

Global Id: T0605900226
Action Type: Other

CHEVRON #9-8655 (Continued) **S102005156**

Date:	01/01/1950
Action:	Leak Reported
Global Id:	T0605900226
Action Type:	REMEDIATION
Date:	01/01/1950
Action:	Excavation
Global Id:	T0605900226
Action Type:	REMEDIATION
Date:	01/01/1950
Action:	Pump & Treat (P&T) Groundwater
Global Id:	T0605900226
Action Type:	REMEDIATION
Date:	01/01/1950
Action:	Soil Vapor Extraction (SVE)

Region:	STATE
Global Id:	T0605901691
Latitude:	33.731549
Longitude:	-117.994441
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	10/04/1995
Lead Agency:	ORANGE COUNTY LOP
Case Worker:	KC
Local Agency:	ORANGE COUNTY LOP
RB Case Number:	083002325T
LOC Case Number:	86UT234
File Location:	Local Agency
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Waste Oil / Motor / Hydraulic / Lubricating
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0605901691
Contact Type:	Regional Board Caseworker
Contact Name:	ROSE SCOTT
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500
City:	RIVERSIDE
Email:	rscott@waterboards.ca.gov
Phone Number:	9513206375
Global Id:	T0605901691
Contact Type:	Local Agency Caseworker
Contact Name:	GENIECE HIGGINS
Organization Name:	ORANGE COUNTY LOP
Address:	1241 EAST DYER ROAD SUITE 120
City:	SANTA ANA
Email:	ghiggins@ochca.com
Phone Number:	7144336260

CHEVRON #9-8655 (Continued) **S102005156**

Status History:

Global Id:	T0605901691
Status:	Completed - Case Closed
Status Date:	10/04/1995
Global Id:	T0605901691
Status:	Open - Case Begin Date
Status Date:	10/09/1986

Regulatory Activities:

Global Id:	T0605901691
Action Type:	Other
Date:	01/01/1950
Action:	Leak Reported
Global Id:	T0605901691
Action Type:	REMEDIATION
Date:	01/01/1950
Action:	Excavation
Global Id:	T0605901691
Action Type:	REMEDIATION
Date:	01/01/1950
Action:	Pump & Treat (P&T) Groundwater
Global Id:	T0605901691
Action Type:	Other
Date:	01/01/1950
Action:	Leak Discovery

Region:	STATE
Global Id:	T0605900930
Latitude:	33.7303671863685
Longitude:	-117.989553809166
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	01/19/2006
Lead Agency:	ORANGE COUNTY LOP
Case Worker:	KC
Local Agency:	ORANGE COUNTY LOP
RB Case Number:	083001182T
LOC Case Number:	88UT204
File Location:	Local Agency
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0605900930
Contact Type:	Local Agency Caseworker
Contact Name:	GENIECE HIGGINS
Organization Name:	ORANGE COUNTY LOP
Address:	1241 EAST DYER ROAD SUITE 120
City:	SANTA ANA

CHEVRON #9-8655 (Continued) **S102005156**

Email: ghiggins@ochca.com
Phone Number: 7144336260

Global Id: T0605900930
Contact Type: Regional Board Caseworker
Contact Name: TOM E. MBEKE-EKANEM
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 MAIN STREET, SUITE 500
City: RIVERSIDE
Email: tmbeke-ekanem@waterboards.ca.gov
Phone Number: 9513202007

Status History:
Global Id: T0605900930
Status: Completed - Case Closed
Status Date: 01/19/2006

Global Id: T0605900930
Status: Open - Case Begin Date
Status Date: 12/15/1988

Global Id: T0605900930
Status: Open - Verification Monitoring
Status Date: 10/24/2001

Regulatory Activities:
Global Id: T0605900930
Action Type: Other
Date: 01/01/1950
Action: Leak Began

Global Id: T0605900930
Action Type: ENFORCEMENT
Date: 10/21/2005
Action: LOP Case Closure Summary to RB

Global Id: T0605900930
Action Type: ENFORCEMENT
Date: 01/19/2006
Action: Closure/No Further Action Letter

Global Id: T0605900930
Action Type: ENFORCEMENT
Date: 04/29/2004
Action: Staff Letter

Global Id: T0605900930
Action Type: ENFORCEMENT
Date: 12/03/2002
Action: Staff Letter

Global Id: T0605900930
Action Type: Other
Date: 01/01/1950
Action: Leak Discovery

CHEVRON #9-8655 (Continued) **S102005156**

Global Id: T0605900930
Action Type: Other
Date: 01/01/1950
Action: Leak Reported

ORANGE CO. LUST:
Region: ORANGE
Facility Id: 88UT204
Current Status: Certification (Case Closed)
Released Substance: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed: 01/19/2006
Case Type: Other Ground Water
Record ID: RO0001272

Region: ORANGE
Facility Id: 86UT234
Current Status: Certification (Case Closed)
Released Substance: Waste oil/Used oil
Date Closed: 10/04/1995
Case Type: Other Ground Water
Record ID: RO0001553

Region: ORANGE
Facility Id: 84UT008
Current Status: Post Remedial Action
Released Substance: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed: Not reported
Case Type: Other Ground Water
Record ID: RO0001693

Region: ORANGE
Facility Id: 86UT193
Current Status: Certification (Case Closed)
Released Substance: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed: 12/13/2004
Case Type: Other Ground Water
Record ID: RO0002988

LUST REG 8:
Region: 8
County: Orange
Regional Board: Santa Ana Region
Facility Status: Case Closed
Case Number: 083002325T
Local Case Num: 86UT234
Case Type: Other ground water affected
Substance: Waste Oil
Qty Leaked: 0
Abate Method: Not reported
Cross Street: Not reported
Enf Type: Not reported
Funding: Not reported
How Discovered: Tank Closure
How Stopped: Close Tank
Leak Cause: Unknown

CHEVRON #9-8655 (Continued) **S102005156**

Leak Source:	Unknown
Global ID:	T0605901691
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Review Date:	Not reported
Prelim Assess:	Not reported
Discover Date:	10/9/1986
Enforcement Date:	Not reported
Close Date:	10/4/1995
Workplan:	Not reported
Pollution Char:	Not reported
Remed Plan:	Not reported
Remed Action:	Not reported
Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.7302521
Longitude:	-117.9932681
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	0
MTBE Tested:	Not Required to be Tested.
MTBE Class:	*
Staff:	RS
Staff Initials:	KC
Lead Agency:	Local Agency
Local Agency:	30000L
Hydr Basin #:	Not reported
Beneficial:	MUN
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported

Summary: Not reported

Q85 **J C PENNEY FACILITY NUMBER 1069** **RCRA-SQG 1000857627**
ESE **7777 EDINGER AVE UNIT E1 SE** **FINDS CAD983670696**
1/4-1/2 **HUNTINGTON BEACH, CA** **CA LUST**
0.348 mi. **CA HAZNET**
1838 ft. **Site 5 of 9 in cluster Q**

Relative:
Higher

Actual:
25 ft.

RCRA-SQG:

Date form received by agency:	06/25/1993
Facility name:	J C PENNEY FACILITY NUMBER 1069
Facility address:	7777 EDINGER AVE UNIT E1 SE COR HUNTINGTON BEACH, CA 92647
EPA ID:	CAD983670696
Contact:	BOB ARNESON
Contact address:	6131 ORANGETHORPE AVE BUENA PARK, CA 90620
Contact country:	US

J C PENNEY FACILITY NUMBER 1069 (Continued) **1000857627**

Contact telephone: (714) 523-6853
Contact email: Not reported
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: J C PENNEY CO INC
Owner/operator address: 6131 ORANGETHORPE AVE
BUENA PARK, CA 90620
Owner/operator country: Not reported
Owner/operator telephone: (714) 523-6853
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110009551305

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

LUST REG 8:
Region: 8
County: Orange

J C PENNEY FACILITY NUMBER 1069 (Continued) **1000857627**

Regional Board: Santa Ana Region
Facility Status: Post remedial action monitoring
Case Number: 083000549T
Local Case Num: 84UT008
Case Type: Other ground water affected
Substance: Gasoline
Qty Leaked: 0
Abate Method: Not reported
Cross Street: Not reported
Enf Type: Not reported
Funding: Not reported
How Discovered: Tank Closure
How Stopped: Close Tank
Leak Cause: Unknown
Leak Source: Unknown
Global ID: T0605900438
How Stopped Date: 9/9/9999
Enter Date: Not reported
Review Date: Not reported
Prelim Assess: Not reported
Discover Date: 10/29/1984
Enforcement Date: Not reported
Close Date: Not reported
Workplan: Not reported
Pollution Char: Not reported
Remed Plan: Not reported
Remed Action: Not reported
Monitoring: 1/1/1965
Enter Date: Not reported
GW Qualifies: ND
Soil Qualifies: Not reported
Operator: Not reported
Facility Contact: Not reported
Interim: Not reported
Oversite Program: LUST
Latitude: 33.7302521
Longitude: -117.9932681
MTBE Date: 12/13/2002
Max MTBE GW: 0
MTBE Concentration: 0
Max MTBE Soil: Not reported
MTBE Fuel: 1
MTBE Tested: MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class: *
Staff: TME
Staff Initials: KC
Lead Agency: Local Agency
Local Agency: 30000L
Hydr Basin #: Not reported
Beneficial: MUN
Priority: Not reported
Cleanup Fund Id: Not reported
Work Suspended: Not reported
Summary: Not reported

HAZNET:
Year: 1995

J C PENNEY FACILITY NUMBER 1069 (Continued) **1000857627**

Gepaid: CAD983670696
Contact: J C PENNEY CO INC
Telephone: 9724318465
Mailing Name: Not reported
Mailing Address: 6501 LEGACY RD - MS2114
Mailing City,St,Zip: PLANO, TX 750241337
Gen County: Not reported
TSD EPA ID: PAD980707087
TSD County: Not reported
Waste Category: Gas scrubber waste
Disposal Method: Recycler
Tons: .8500
Facility County: Los Angeles

Year: 1995
Gepaid: CAD983670696
Contact: J C PENNEY CO INC
Telephone: 9724318465
Mailing Name: Not reported
Mailing Address: 6501 LEGACY RD - MS2114
Mailing City,St,Zip: PLANO, TX 750241337
Gen County: Not reported
TSD EPA ID: PAD980707087
TSD County: Not reported
Waste Category: Other organic solids
Disposal Method: Not reported
Tons: 1.1250
Facility County: Los Angeles

Year: 1994
Gepaid: CAD983670696
Contact: J C PENNEY CO INC
Telephone: 9724318465
Mailing Name: Not reported
Mailing Address: 6501 LEGACY RD - MS2114
Mailing City,St,Zip: PLANO, TX 750241337
Gen County: Not reported
TSD EPA ID: PAD980707087
TSD County: Not reported
Waste Category: Gas scrubber waste
Disposal Method: Not reported
Tons: .8500
Facility County: Los Angeles

Year: 1994
Gepaid: CAD983670696
Contact: J C PENNEY CO INC
Telephone: 9724318465
Mailing Name: Not reported
Mailing Address: 6501 LEGACY RD - MS2114
Mailing City,St,Zip: PLANO, TX 750241337
Gen County: Not reported
TSD EPA ID: PAD980707087
TSD County: Not reported
Waste Category: Gas scrubber waste
Disposal Method: Recycler
Tons: 1.0250

J C PENNEY FACILITY NUMBER 1069 (Continued) **1000857627**

Facility County: Los Angeles

Year: 1993
Gepaid: CAD983670696
Contact: J C PENNEY CO INC
Telephone: 9724318465
Mailing Name: Not reported
Mailing Address: 6501 LEGACY RD - MS2114
Mailing City,St,Zip: PLANO, TX 750241337
Gen County: Not reported
TSD EPA ID: WAD009477175
TSD County: Not reported
Waste Category: Gas scrubber waste
Disposal Method: Recycler
Tons: 1.64999999999
Facility County: Los Angeles

Click this hyperlink while viewing on your computer to access additional CA_HAZNET: detail in the EDR Site Report.

Q86 **DRY CLEANERS UNIT #86 (FORMER)** **CA SLIC** **S106484191**
ESE **7777 EDINGER AVE, HUNTINGTON BCH MALL** **N/A**
1/4-1/2 **HUNTINGTON BEACH, CA 92647**
0.348 mi.
1838 ft. **Site 6 of 9 in cluster Q**

Relative:
Higher

Actual:
25 ft.

SLIC:
Region: STATE
Facility Status: **Completed - Case Closed**
Status Date: 06/01/1998
Global Id: SL208323887
Lead Agency: SANTA ANA RWQCB (REGION 8)
Lead Agency Case Number: Not reported
Latitude: 33.6939752881984
Longitude: -118.002074392917
Case Type: Cleanup Program Site
Case Worker: MGC
Local Agency: Not reported
RB Case Number: SL208323887
File Location: Not reported
Potential Media Affected: Not reported
Potential Contaminants of Concern: Not reported
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Q87 **CHEVRON #9-8655** **CA HIST CORTESE** **S101588954**
ESE **7777 EDINGER AVE** **CA LUST** **N/A**
1/4-1/2 **HUNTINGTON BEACH, CA 92647** **CA FID UST**
0.348 mi. **CA EMI**
1838 ft. **Site 7 of 9 in cluster Q**

Relative:
Higher

Actual:
25 ft.

CORTESE:
Region: CORTESE
Facility County Code: 30
Reg By: LTNKA

CHEVRON #9-8655 (Continued) **S101588954**

Reg Id: 083001182T

Region: CORTESE
Facility County Code: 30
Reg By: LTNKA
Reg Id: 083000549T

Region: CORTESE
Facility County Code: 30
Reg By: LTNKA
Reg Id: 083000290T

LUST REG 8:
Region: 8
County: Orange
Regional Board: Santa Ana Region
Facility Status: Post remedial action monitoring
Case Number: 083001182T
Local Case Num: 88UT204
Case Type: Other ground water affected
Substance: Gasoline
Qty Leaked: 0
Abate Method: Not reported
Cross Street: Not reported
Enf Type: SEL
Funding: Not reported
How Discovered: Tank Closure
How Stopped: Close Tank
Leak Cause: Unknown
Leak Source: Unknown
Global ID: T0605900930
How Stopped Date: 9/9/9999
Enter Date: Not reported
Review Date: Not reported
Prelim Assess: Not reported
Discover Date: 12/15/1988
Enforcement Date: Not reported
Close Date: Not reported
Workplan: Not reported
Pollution Char: Not reported
Remed Plan: Not reported
Remed Action: Not reported
Monitoring: 10/24/2001
Enter Date: Not reported
GW Qualifies: =
Soil Qualifies: Not reported
Operator: Not reported
Facility Contact: Not reported
Interim: Not reported
Oversite Program: LUST
Latitude: 33.7302521
Longitude: -117.9932681
MTBE Date: 2/12/2002
Max MTBE GW: 130
MTBE Concentration: 0
Max MTBE Soil: Not reported
MTBE Fuel: 1

CHEVRON #9-8655 (Continued) **S101588954**

MTBE Tested: MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class: *
Staff: TME
Staff Initials: KC
Lead Agency: Local Agency
Local Agency: 30000L
Hydr Basin #: Not reported
Beneficial: MUN
Priority: Not reported
Cleanup Fund Id: Not reported
Work Suspended: Not reported
Summary: Not reported

CA FID UST:
Facility ID: 30000586
Regulated By: UTNKA
Regulated ID: Not reported
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 7148915596
Mail To: Not reported
Mailing Address: P O BOX 2833 1300 S
Mailing Address 2: Not reported
Mailing City,St,Zip: HUNTINGTON BEACH 92647
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

EMI:
Year: 1987
County Code: 30
Air Basin: SC
Facility ID: 37416
Air District Name: SC
SIC Code: 5311
Air District Name: SOUTH COAST AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers & Smllr Tons/Yr: 0

Year: 1990
County Code: 30
Air Basin: SC
Facility ID: 56790
Air District Name: SC
SIC Code: 5311

CHEVRON #9-8655 (Continued) **S101588954**

Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	1
NOX - Oxides of Nitrogen Tons/Yr:	2
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1990
County Code:	30
Air Basin:	SC
Facility ID:	37416
Air District Name:	SC
SIC Code:	5311
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1993
County Code:	30
Air Basin:	SC
Facility ID:	37416
Air District Name:	SC
SIC Code:	5311
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

Year:	1995
County Code:	30
Air Basin:	SC
Facility ID:	37416
Air District Name:	SC
SIC Code:	5311
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0

CHEVRON #9-8655 (Continued) **S101588954**

NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers & Smllr Tons/Yr: 0

Q88 **HUNTINGTON BEACH MALL** **CA SLIC** **S101125672**
ESE **7777 EDINGER AVENUE** **N/A**
1/4-1/2 **HUNTINGTON BEACH, CA**
0.348 mi.
1838 ft. **Site 8 of 9 in cluster Q**

Relative:
Higher

Actual:
25 ft.

SLIC REG 8:
Type: Soil and Groundwater
Facility Status: Closed
Region: 8
Staff: Kamron Saremi, Tel 909-782-4303, SLIC
Substance: Kamron Saremi, Tel 909-782-4303, SLIC
Lead Agency: Kamron Saremi, Tel 909-782-4303, SLIC
Location Code: Kamron Saremi, Tel 909-782-4303, SLIC
Thomas Bros Code: Kamron Saremi, Tel 909-782-4303, SLIC

Q89 **SHER LANE RETAIL CENTER DRY CLEANER** **CA SLIC** **S108543094**
ESE **7672-7746 EDINGER AVENUE** **N/A**
1/4-1/2 **HUNTINGTON BEACH, CA**
0.358 mi.
1890 ft. **Site 9 of 9 in cluster Q**

Relative:
Higher

Actual:
25 ft.

SLIC:
Region: STATE
Facility Status: **Open - Remediation**
Status Date: 12/15/2011
Global Id: SL0605900035
Lead Agency: SANTA ANA RWQCB (REGION 8)
Lead Agency Case Number: Not reported
Latitude: 33.7289618428253
Longitude: -117.994317412376
Case Type: Cleanup Program Site
Case Worker: WDM
Local Agency: ORANGE COUNTY
RB Case Number: SherLaneHB
File Location: Regional Board
Potential Media Affected: Other Groundwater (uses other than drinking water), Soil, Soil Vapor
Potential Contaminants of Concern: Tetrachloroethylene (PCE), Trichloroethylene (TCE)
Site History: Two former dry cleaners were operated for different time periods between approximately 1962 and 1993 at the Site. The building at the Site is currently divided into three retail stores. The property is located in the Orange County Groundwater Management Zone of the Santa Ana River Watershed. The subsurface lithology ranges from silty clayey sand to silty clay between 0 and 5 feet below ground surface (bgs), clayey sand to sand at 10 or 11 feet bgs, and from 11 to 20 feet bgs the soils consist of interbedded layers of silty clay and sand. Groundwater was initially reported at approximately 6 feet bgs. The nearest surface water to the Site is the East Garden Grove Wintersburg Channel, located approximately 0.5 miles southeast of the Site. In 2004, seven push borings were advanced along the south and east sides of the building, and samples of the soil and groundwater

SHER LANE RETAIL CENTER DRY CLEANER (Continued) **S108543094**

were collected. The maximum PCE concentration in the soil was 237 micrograms/kilogram (a%g/kg), and TCE concentrations ranged from non-detect (ND) to 16 a%g/kg. Groundwater was detected between 7 and 13 feet bgs. PCE concentrations in the groundwater ranged from 2.3 to 144 micrograms/liter (a%g/l), and TCE concentrations ranged from 4.4 to 923 a%g/l. In 2005, three groundwater monitoring wells were installed. The initial groundwater samples contained PCE at concentrations up to 824 a%g/l, and TCE at concentrations up to 566 a%g/l. Groundwater samples have been collected quarterly from the Sites three wells since 2005. In March 2009, soil vapor and soil samples were collected from 15 locations: seven from beneath the building slab and seven below grade outside the building. PCE vapor concentrations ranged from 2.7 to 23,456 a%g/l, and the maximum TCE vapor concentration was 77 a%g/l. The analytical results for VOCs in the soil matrix samples showed a maximum of 58,800 microgram per kilogram (a%g/kg) of PCE and 30 a%g/kg for TCE. Grab groundwater samples were also collected in March 2009, using a push rig at two depth ranges (5 to 9 and 16 to 20 feet below grade) at nine locations west of the building. Elevated concentrations of PCE and TCE were detected in several water samples from both sampling zones. PCE concentrations ranged from <5 to 1,780 a%g/l, and TCE concentrations ranged from <5 to 1,110 a%g/l. Two groundwater monitoring wells were installed to the west, across Sher Lane. Groundwater samples were collected from all of the Sites groundwater monitoring wells on April 1, 2009. The highest concentrations of PCE (4,020 a%g/l) was detected in monitoring well MW-5, which is located on the west side of Sher Lane, and is the Sites farthest downgradient monitoring well. January 2010 indoor air samples were collected from inside the two western most stores, 3 Day Blinds and Stone Henge. December 2011 Soil vapor extraction and treatment system installed and operational.

Click here to access the California GeoTracker records for this facility:

SLIC REG 8:

Type:	Soil and Groundwater
Facility Status:	Additional Characterization Underway
Region:	8
Staff:	WDM
Substance:	WDM
Lead Agency:	WDM
Location Code:	WDM
Thomas Bros Code:	WDM

R90 **DROWN NEWS AGENCY** **CA HIST CORTESE** **S105027382**
NNE **15172 GOLDENWEST** **CA LUST** **N/A**
1/4-1/2 **WESTMINISTER, CA**
0.374 mi.
1977 ft. **Site 1 of 2 in cluster R**

Relative:
Higher

Actual:
34 ft.

CORTESE:

Region:	CORTESE
Facility County Code:	30
Reg By:	LTNKA
Reg Id:	083001405T

LUST:

Region:	STATE

DROWN NEWS AGENCY (Continued) **S105027382**

Global Id:	T0605901060
Latitude:	33.7433106
Longitude:	-118.0000163
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	10/24/1990
Lead Agency:	ORANGE COUNTY LOP
Case Worker:	SK
Local Agency:	ORANGE COUNTY LOP
RB Case Number:	083001405T
LOC Case Number:	90UT005
File Location:	Local Agency
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0605901060
Contact Type:	Local Agency Caseworker
Contact Name:	JULIE WOZENCRAFT
Organization Name:	ORANGE COUNTY LOP
Address:	1241 EAST DYER ROAD SUITE 120
City:	SANTA ANA
Email:	jwozencraft@ochca.com
Phone Number:	7144336252

Global Id:	T0605901060
Contact Type:	Regional Board Caseworker
Contact Name:	PATRICIA HANNON
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500
City:	RIVERSIDE
Email:	phannon@waterboards.ca.gov
Phone Number:	Not reported

Status History:

Global Id:	T0605901060
Status:	Completed - Case Closed
Status Date:	10/24/1990

Global Id:	T0605901060
Status:	Open - Case Begin Date
Status Date:	12/29/1989

Regulatory Activities:

Global Id:	T0605901060
Action Type:	Other
Date:	01/01/1950
Action:	Leak Discovery

Global Id:	T0605901060
Action Type:	Other
Date:	01/01/1950
Action:	Leak Reported

DROWN NEWS AGENCY (Continued) **S105027382**

ORANGE CO. LUST:

Region:	ORANGE
Facility Id:	90UT005
Current Status:	Certification (Case Closed)
Released Substance:	Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed:	10/24/1990
Case Type:	Soil Only
Record ID:	RO0002637

LUST REG 8:

Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	083001405T
Local Case Num:	90UT005
Case Type:	Soil only
Substance:	Gasoline
Qty Leaked:	0
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Close Tank
Leak Cause:	Unknown
Leak Source:	Unknown
Global ID:	T0605901060
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Review Date:	Not reported
Prelim Assess:	Not reported
Discover Date:	12/29/1989
Enforcement Date:	Not reported
Close Date:	10/24/1990
Workplan:	Not reported
Pollution Char:	Not reported
Remed Plan:	Not reported
Remed Action:	Not reported
Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.7433106
Longitude:	-118.0000163
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
MTBE Class:	*

DROWN NEWS AGENCY (Continued) **S105027382**

Staff: PAH
Staff Initials: SK
Lead Agency: Local Agency
Local Agency: 30000L
Hydr Basin #: Not reported
Beneficial: MUN
Priority: Not reported
Cleanup Fund Id: Not reported
Work Suspended: Not reported
Summary: Not reported

R91 **ANDERSON NEWS CO** **CA NPDES** **S105086680**
NNE **15172 GOLDENWEST** **CA LUST** **N/A**
1/4-1/2 **WESTMINSTER, CA 92683**
0.374 mi.
1977 ft. **Site 2 of 2 in cluster R**

Relative:
Higher

Actual:
34 ft.

NPDES:

Npdes Number:	CAS000001
Facility Status:	Terminated
Agency Id:	0
Region:	8
Regulatory Measure Id:	209188
Order No:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place Id:	Not reported
WDID:	8 30I018325
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	09/05/2003
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	09/21/2011
Discharge Name:	Don De Cristo Concrete Accessories
Discharge Address:	15172 Goldenwest Cir
Discharge City:	Westminster
Discharge State:	California
Discharge Zip:	92683

LUST:

Region:	STATE
Global Id:	T0605999109
Latitude:	33.742787
Longitude:	-117.999935
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	08/23/2000
Lead Agency:	ORANGE COUNTY LOP
Case Worker:	SK
Local Agency:	ORANGE COUNTY LOP
RB Case Number:	083003700T
LOC Case Number:	00UT012
File Location:	Local Agency
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

ANDERSON NEWS CO (Continued) **S105086680**

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0605999109
Contact Type:	Local Agency Caseworker
Contact Name:	JULIE WOZENCRAFT
Organization Name:	ORANGE COUNTY LOP
Address:	1241 EAST DYER ROAD SUITE 120
City:	SANTA ANA
Email:	jwozencraft@ochca.com
Phone Number:	7144336252

Global Id:	T0605999109
Contact Type:	Regional Board Caseworker
Contact Name:	CARL BERNHARDT
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500
City:	RIVERSIDE
Email:	cbernhardt@waterboards.ca.gov
Phone Number:	9517824495

Status History:

Global Id:	T0605999109
Status:	Completed - Case Closed
Status Date:	08/23/2000

Global Id:	T0605999109
Status:	Open - Case Begin Date
Status Date:	03/29/2000

Regulatory Activities:

Global Id:	T0605999109
Action Type:	Other
Date:	01/01/1950
Action:	Leak Reported

Global Id:	T0605999109
Action Type:	Other
Date:	01/01/1950
Action:	Leak Discovery

Global Id:	T0605999109
Action Type:	ENFORCEMENT
Date:	10/24/1990
Action:	State Water Board Closure Order

ORANGE CO. LUST:

Region:	ORANGE
Facility Id:	00UT012
Current Status:	Certification (Case Closed)
Released Substance:	Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed:	08/23/2000
Case Type:	Other Ground Water
Record ID:	RO0001371

ANDERSON NEWS CO (Continued) **S105086680**

LUST REG 8:

Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	083003700T
Local Case Num:	00UT012
Case Type:	Other ground water affected
Substance:	Gasoline
Qty Leaked:	0
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Close Tank
Leak Cause:	Unknown
Leak Source:	Unknown
Global ID:	T0605999109
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Review Date:	Not reported
Prelim Assess:	Not reported
Discover Date:	3/29/2000
Enforcement Date:	Not reported
Close Date:	8/23/2000
Workplan:	Not reported
Pollution Char:	Not reported
Remed Plan:	Not reported
Remed Action:	Not reported
Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.742787
Longitude:	-117.999935
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
MTBE Class:	*
Staff:	CAB
Staff Initials:	SK
Lead Agency:	Local Agency
Local Agency:	30000L
Hydr Basin #:	Not reported
Beneficial:	MUN
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported

Summary: Not reported

92
SE
1/4-1/2
0.477 mi.
2516 ft.

HUNTINGTON BEACH WATER DEPARTMENT
16192 SHER LN
HUNTINGTON BEACH, CA 92647

CA HIST CORTESE **1000413431**
CA LUST **N/A**

Relative:
Higher

Actual:
23 ft.

CORTESE:

Region:	CORTESE
Facility County Code:	30
Reg By:	LTNKA
Reg Id:	083000681T

LUST:

Region:	STATE
Global Id:	T0605900538
Latitude:	33.726936
Longitude:	-117.993887
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	02/18/1988
Lead Agency:	ORANGE COUNTY LOP
Case Worker:	GH
Local Agency:	ORANGE COUNTY LOP
RB Case Number:	083000681T
LOC Case Number:	87UT179
File Location:	Local Agency
Potential Media Affect:	Under Investigation
Potential Contaminants of Concern:	Waste Oil / Motor / Hydraulic / Lubricating
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0605900538
Contact Type:	Regional Board Caseworker
Contact Name:	PATRICIA HANNON
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500
City:	RIVERSIDE
Email:	phannon@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0605900538
Contact Type:	Local Agency Caseworker
Contact Name:	GENIECE HIGGINS
Organization Name:	ORANGE COUNTY LOP
Address:	1241 EAST DYER ROAD SUITE 120
City:	SANTA ANA
Email:	ghiggins@ochca.com
Phone Number:	7144336260

Status History:

Global Id:	T0605900538
Status:	Completed - Case Closed
Status Date:	02/18/1988

Global Id:	T0605900538
Status:	Open - Case Begin Date
Status Date:	02/18/1988

HUNTINGTON BEACH WATER DEPARTMENT (Continued) **1000413431**

ORANGE CO. LUST:

Region:	ORANGE
Facility Id:	87UT179
Current Status:	Certification (Case Closed)
Released Substance:	Waste oil/Used oil
Date Closed:	02/18/1988
Case Type:	Undetermined
Record ID:	RO0002899

LUST REG 8:

Region:	8
County:	Orange
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	083000681T
Local Case Num:	87UT179
Case Type:	Undefined
Substance:	Waste Oil
Qty Leaked:	0
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Close Tank
Leak Cause:	Unknown
Leak Source:	Unknown
Global ID:	T0605900538
How Stopped Date:	9/9/9999
Enter Date:	Not reported
Review Date:	Not reported
Prelim Assess:	Not reported
Discover Date:	1/1/1965
Enforcement Date:	Not reported
Close Date:	2/18/1988
Workplan:	Not reported
Pollution Char:	Not reported
Remed Plan:	Not reported
Remed Action:	Not reported
Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.7271681
Longitude:	-117.9944721
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	0
MTBE Tested:	Not Required to be Tested.
MTBE Class:	*

HUNTINGTON BEACH WATER DEPARTMENT (Continued) **1000413431**

Staff: PAH
Staff Initials: AR
Lead Agency: Local Agency
Local Agency: 30000L
Hydr Basin #: Not reported
Beneficial: MUN
Priority: Not reported
Cleanup Fund Id: Not reported
Work Suspended: Not reported
Summary: Not reported

S93 **MOBIL #11-G3W** **CA HIST CORTESE** **S105024134**
NNW **15001 GOLDEN** **N/A**
1/4-1/2 **HUNTINGTN BEACH, CA 92647**
0.496 mi.
2620 ft. **Site 1 of 3 in cluster S**

Relative:
Higher

Actual:
30 ft.

CORTESE:
Region: CORTESE
Facility County Code: 30
Reg By: LTNKA
Reg Id: 083000286T

S94 **ROBERT HARLAN JACKSON** **CA LUST** **U001577285**
NNW **15001 GOLDENWEST ST** **CA HIST UST** **N/A**
1/4-1/2 **HUNTINGTON BEACH, CA 92647**
0.496 mi.
2621 ft. **Site 2 of 3 in cluster S**

Relative:
Higher

Actual:
29 ft.

LUST:
Region: STATE
Global Id: T0605976113
Latitude: 33.744115
Longitude: -118.007381
Case Type: LUST Cleanup Site
Status: Open - Eligible for Closure
Status Date: 12/12/2012
Lead Agency: ORANGE COUNTY LOP
Case Worker: TE
Local Agency: ORANGE COUNTY LOP
RB Case Number: Not reported
LOC Case Number: 00UT038
File Location: Local Agency
Potential Media Affect: Aquifer used for drinking water supply
Potential Contaminants of Concern: Gasoline
Site History: Please refer to recent Site Documents or Monitoring Reports in GeoTracker for site history. Orange County is not responsible for the accuracy of any professional interpretations provided in reports submitted by consultants for the responsible party.

Click here to access the California GeoTracker records for this facility:

Contact:
Global Id: T0605976113
Contact Type: Regional Board Caseworker
Contact Name: ROSE SCOTT
Organization Name: SANTA ANA RWQCB (REGION 8)

ROBERT HARLAN JACKSON (Continued) **U001577285**

Address: 3737 MAIN STREET, SUITE 500
City: RIVERSIDE
Email: rscott@waterboards.ca.gov
Phone Number: 9513206375

Global Id: T0605976113
Contact Type: Local Agency Caseworker
Contact Name: TAMARA ESCOBEDO
Organization Name: ORANGE COUNTY LOP
Address: 1241 EAST DYER ROAD SUITE 120
City: SANTA ANA
Email: tescobedo@ochca.com
Phone Number: 7144336251

Status History:
Global Id: T0605976113
Status: Open - Case Begin Date
Status Date: 10/24/2000

Global Id: T0605976113
Status: Open - Eligible for Closure
Status Date: 12/12/2012

Global Id: T0605976113
Status: Open - Remediation
Status Date: 04/07/2004

Global Id: T0605976113
Status: Open - Site Assessment
Status Date: 10/24/2000

Regulatory Activities:
Global Id: T0605976113
Action Type: ENFORCEMENT
Date: 06/13/2007
Action: Staff Letter

Global Id: T0605976113
Action Type: ENFORCEMENT
Date: 12/22/2006
Action: Staff Letter

Global Id: T0605976113
Action Type: ENFORCEMENT
Date: 04/20/2011
Action: Site Visit / Inspection / Sampling

Global Id: T0605976113
Action Type: Other
Date: 01/01/1950
Action: Leak Reported

Global Id: T0605976113
Action Type: REMEDIATION
Date: 01/01/1950
Action: Pump & Treat (P&T) Groundwater

ROBERT HARLAN JACKSON (Continued) **U001577285**

Global Id: T0605976113
Action Type: REMEDIATION
Date: 01/01/1950
Action: Other (Use Description Field)

Global Id: T0605976113
Action Type: Other
Date: 01/01/1950
Action: Leak Began

Global Id: T0605976113
Action Type: ENFORCEMENT
Date: 07/10/2009
Action: Staff Letter

Global Id: T0605976113
Action Type: RESPONSE
Date: 09/14/2003
Action: Corrective Action Plan / Remedial Action Plan

Global Id: T0605976113
Action Type: REMEDIATION
Date: 01/01/1950
Action: In Situ Physical/Chemical Treatment (other than SVE)

Global Id: T0605976113
Action Type: REMEDIATION
Date: 01/01/1950
Action: In Situ Physical/Chemical Treatment (other than SVE)

Global Id: T0605976113
Action Type: ENFORCEMENT
Date: 11/01/2011
Action: Notice of Responsibility

Global Id: T0605976113
Action Type: REMEDIATION
Date: 01/01/1950
Action: In Situ Physical/Chemical Treatment (other than SVE)

Global Id: T0605976113
Action Type: ENFORCEMENT
Date: 07/14/2003
Action: Staff Letter

Global Id: T0605976113
Action Type: ENFORCEMENT
Date: 10/18/2004
Action: Staff Letter

Global Id: T0605976113
Action Type: ENFORCEMENT
Date: 02/14/2005
Action: Staff Letter

Global Id: T0605976113
Action Type: ENFORCEMENT

ROBERT HARLAN JACKSON (Continued) **U001577285**

Date: 09/28/2005
Action: Staff Letter

Global Id: T0605976113
Action Type: ENFORCEMENT
Date: 08/23/2007
Action: Staff Letter

Global Id: T0605976113
Action Type: ENFORCEMENT
Date: 08/24/2007
Action: Staff Letter

Global Id: T0605976113
Action Type: ENFORCEMENT
Date: 05/14/2007
Action: Staff Letter

Global Id: T0605976113
Action Type: ENFORCEMENT
Date: 11/24/2003
Action: Staff Letter

Global Id: T0605976113
Action Type: ENFORCEMENT
Date: 09/22/2003
Action: Staff Letter

Global Id: T0605976113
Action Type: ENFORCEMENT
Date: 05/12/2008
Action: Staff Letter

Global Id: T0605976113
Action Type: ENFORCEMENT
Date: 05/08/2007
Action: Staff Letter

Global Id: T0605976113
Action Type: ENFORCEMENT
Date: 11/28/2007
Action: Staff Letter

Global Id: T0605976113
Action Type: REMEDIATION
Date: 01/01/1950
Action: Excavation

Global Id: T0605976113
Action Type: RESPONSE
Date: 08/06/2013
Action: Request for Closure - Regulator Responded

Global Id: T0605976113
Action Type: Other
Date: 01/01/1950
Action: Leak Discovery

ROBERT HARLAN JACKSON (Continued) **U001577285**

Global Id: T0605976113
Action Type: ENFORCEMENT
Date: 05/03/2012
Action: Staff Letter

Global Id: T0605976113
Action Type: ENFORCEMENT
Date: 05/04/2012
Action: Staff Letter

ORANGE CO. LUST:
Region: ORANGE
Facility Id: 00UT038
Current Status: Remedial Action
Released Substance: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed: Not reported
Case Type: Other Ground Water
Record ID: RO0002063

LUST REG 8:
Region: 8
County: Orange
Regional Board: Santa Ana Region
Facility Status: Remedial action (cleanup) Underway
Case Number: Not reported
Local Case Num: 00UT038
Case Type: Other ground water affected
Substance: Gasoline
Qty Leaked: 0
Abate Method: Not reported
Cross Street: Not reported
Enf Type: SEL
Funding: Not reported
How Discovered: Tank Closure
How Stopped: New Tank
Leak Cause: Unknown
Leak Source: Tank
Global ID: T0605976113
How Stopped Date: 9/9/9999
Enter Date: Not reported
Review Date: Not reported
Prelim Assess: Not reported
Discover Date: 10/24/2000
Enforcement Date: Not reported
Close Date: Not reported
Workplan: Not reported
Pollution Char: 10/24/2000
Remed Plan: Not reported
Remed Action: 4/7/2004
Monitoring: Not reported
Enter Date: Not reported
GW Qualifies: =
Soil Qualifies: =
Operator: Not reported
Facility Contact: Not reported

ROBERT HARLAN JACKSON (Continued) **U001577285**

Interim: Not reported
Oversite Program: LUST
Latitude: Not reported
Longitude: Not reported
MTBE Date: 5/20/2002
Max MTBE GW: 56500
MTBE Concentration: 0
Max MTBE Soil: .324
MTBE Fuel: 1
MTBE Tested: MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class: *
Staff: RS
Staff Initials: AR
Lead Agency: Local Agency
Local Agency: 30000L
Hydr Basin #: Not reported
Beneficial: MUN
Priority: Not reported
Cleanup Fund Id: Not reported
Work Suspended: Not reported
Summary: Not reported

HIST UST:
Region: STATE
Facility ID: 00000039193
Facility Type: Gas Station
Other Type: Not reported
Total Tanks: 0004
Contact Name: SAME
Telephone: 7148937477
Owner Name: MOBIL OIL CORP
Owner Address: 612 S. FLOWER ST
Owner City,St,Zip: LOS ANGELES, CA 90017

Tank Num: 001
Container Num: 1
Year Installed: Not reported
Tank Capacity: 00000280
Tank Used for: WASTE
Type of Fuel: WASTE OIL
Tank Construction: Not reported
Leak Detection: Stock Inventor

Tank Num: 002
Container Num: 2
Year Installed: 1972
Tank Capacity: 00012000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Tank Construction: Not reported
Leak Detection: Stock Inventor

Tank Num: 003
Container Num: 3
Year Installed: 1972
Tank Capacity: 00006000
Tank Used for: PRODUCT

ROBERT HARLAN JACKSON (Continued) **U001577285**

Type of Fuel: PREMIUM
Tank Construction: Not reported
Leak Detection: Stock Inventor

Tank Num: 004
Container Num: 4
Year Installed: 1972
Tank Capacity: 00008000
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Tank Construction: Not reported
Leak Detection: Stock Inventor

S95 **MOBIL OIL** **CA LUST** **S104576437**
NNW **15001 GOLDEN WEST ST** **N/A**
1/4-1/2 **HUNTINGTON BEACH, CA 92647**
0.496 mi.
2621 ft. **Site 3 of 3 in cluster S**

Relative:
Higher

Actual:
29 ft.

LUST:

Region:	STATE
Global Id:	T0605900222
Latitude:	33.7445586
Longitude:	-118.0070396
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	02/06/1986
Lead Agency:	ORANGE COUNTY LOP
Case Worker:	GH
Local Agency:	ORANGE COUNTY LOP
RB Case Number:	083000286T
LOC Case Number:	85UT096
File Location:	Local Agency
Potential Media Affect:	Under Investigation
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0605900222
Contact Type:	Local Agency Caseworker
Contact Name:	GENIECE HIGGINS
Organization Name:	ORANGE COUNTY LOP
Address:	1241 EAST DYER ROAD SUITE 120
City:	SANTA ANA
Email:	ghiggins@ochca.com
Phone Number:	7144336260

Global Id:	T0605900222
Contact Type:	Regional Board Caseworker
Contact Name:	ROSE SCOTT
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500
City:	RIVERSIDE
Email:	rscott@waterboards.ca.gov
Phone Number:	9513206375

MOBIL OIL (Continued) **S104576437**

Status History:
Global Id: T0605900222
Status: Completed - Case Closed
Status Date: 02/06/1986

Global Id: T0605900222
Status: Open - Case Begin Date
Status Date: 02/06/1986

ORANGE CO. LUST:
Region: ORANGE
Facility Id: 85UT096
Current Status: Certification (Case Closed)
Released Substance: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed: 02/06/1986
Case Type: Undetermined
Record ID: RO0000733

LUST REG 8:
Region: 8
County: Orange
Regional Board: Santa Ana Region
Facility Status: Case Closed
Case Number: 083000286T
Local Case Num: 85UT096
Case Type: Undefined
Substance: Gasoline
Qty Leaked: 0
Abate Method: Not reported
Cross Street: Not reported
Enf Type: Not reported
Funding: Not reported
How Discovered: Tank Closure
How Stopped: Close Tank
Leak Cause: Unknown
Leak Source: Unknown
Global ID: T0605900222
How Stopped Date: 9/9/9999
Enter Date: Not reported
Review Date: Not reported
Prelim Assess: Not reported
Discover Date: 1/1/1965
Enforcement Date: Not reported
Close Date: 2/6/1986
Workplan: Not reported
Pollution Char: Not reported
Remed Plan: Not reported
Remed Action: Not reported
Monitoring: Not reported
Enter Date: Not reported
GW Qualifies: Not reported
Soil Qualifies: Not reported
Operator: Not reported
Facility Contact: Not reported
Interim: Not reported

MOBIL OIL (Continued) **S104576437**

Oversite Program:	LUST
Latitude:	33.7445586
Longitude:	-118.0070396
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
MTBE Class:	*
Staff:	RS
Staff Initials:	AR
Lead Agency:	Local Agency
Local Agency:	30000L
Hydr Basin #:	Not reported
Beneficial:	MUN
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

96
WSW
1/2-1
0.507 mi.
2675 ft.

TOSCO - 76 #5280
6502 EDINGER AVE
HUNTINGTON BEACH, CA 92647

CA NPDES **U000035411**
CA LUST **N/A**
CA Notify 65

Relative:
Lower

Actual:
14 ft.

NPDES:

Npdes Number:	Not reported
Facility Status:	Historical
Agency Id:	11545
Region:	8
Regulatory Measure Id:	206183
Order No:	Not reported
Regulatory Measure Type:	Enrollee
Place Id:	228325
WDID:	8 303235001
Program Type:	NPDESWW
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	11/19/1999
Expiration Date Of Regulatory Measure:	02/01/2012
Termination Date Of Regulatory Measure:	02/16/2012
Discharge Name:	ConocoPhillips Company Long Beach
Discharge Address:	3900 Kilroy Airport Way 210
Discharge City:	Long Beach
Discharge State:	CA
Discharge Zip:	90806

LUST:

Region:	STATE
Global Id:	T0605901043
Latitude:	33.7297451
Longitude:	-118.0153409
Case Type:	LUST Cleanup Site
Status:	Open - Eligible for Closure
Status Date:	12/14/2012
Lead Agency:	ORANGE COUNTY LOP

TOSCO - 76 #5280 (Continued) **U000035411**

Case Worker:	TE
Local Agency:	ORANGE COUNTY LOP
RB Case Number:	083001381T
LOC Case Number:	90UT055
File Location:	Local Agency
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Gasoline
Site History:	Please refer to recent Site Documents or Monitoring Reports in GeoTracker for site history. Orange County is not responsible for the accuracy of any professional interpretations provided in reports submitted by consultants for the responsible party.

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0605901043
Contact Type:	Regional Board Caseworker
Contact Name:	NANCY OLSON-MARTIN
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500
City:	RIVERSIDE
Email:	nolson-martin@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0605901043
Contact Type:	Local Agency Caseworker
Contact Name:	TAMARA ESCOBEDO
Organization Name:	ORANGE COUNTY LOP
Address:	1241 EAST DYER ROAD SUITE 120
City:	SANTA ANA
Email:	tescobedo@ochca.com
Phone Number:	7144336251

Status History:

Global Id:	T0605901043
Status:	Open - Assessment & Interim Remedial Action
Status Date:	06/09/2011

Global Id:	T0605901043
Status:	Open - Assessment & Interim Remedial Action
Status Date:	03/15/2012

Global Id:	T0605901043
Status:	Open - Case Begin Date
Status Date:	02/20/1990

Global Id:	T0605901043
Status:	Open - Eligible for Closure
Status Date:	12/14/2012

Global Id:	T0605901043
Status:	Open - Remediation
Status Date:	02/20/1990

Global Id:	T0605901043
Status:	Open - Remediation
Status Date:	08/21/1996

TOSCO - 76 #5280 (Continued) **U000035411**

Global Id: T0605901043
Status: Open - Verification Monitoring
Status Date: 06/09/2011

Regulatory Activities:

Global Id: T0605901043
Action Type: ENFORCEMENT
Date: 01/29/2009
Action: Staff Letter

Global Id: T0605901043
Action Type: ENFORCEMENT
Date: 02/17/2012
Action: Staff Letter

Global Id: T0605901043
Action Type: ENFORCEMENT
Date: 05/24/2005
Action: Staff Letter

Global Id: T0605901043
Action Type: ENFORCEMENT
Date: 05/06/2011
Action: Staff Letter

Global Id: T0605901043
Action Type: ENFORCEMENT
Date: 03/29/2011
Action: Staff Letter

Global Id: T0605901043
Action Type: REMEDIATION
Date: 01/01/1950
Action: Excavation

Global Id: T0605901043
Action Type: REMEDIATION
Date: 01/01/1950
Action: Pump & Treat (P&T) Groundwater

Global Id: T0605901043
Action Type: ENFORCEMENT
Date: 07/09/2008
Action: Staff Letter

Global Id: T0605901043
Action Type: ENFORCEMENT
Date: 08/24/2012
Action: Staff Letter

Global Id: T0605901043
Action Type: Other
Date: 01/01/1950
Action: Leak Began

Global Id: T0605901043
Action Type: ENFORCEMENT

TOSCO - 76 #5280 (Continued) **U000035411**

Date: 07/03/2009
Action: Staff Letter

Global Id: T0605901043
Action Type: ENFORCEMENT
Date: 05/31/2012
Action: Staff Letter

Global Id: T0605901043
Action Type: REMEDIATION
Date: 01/01/1950
Action: Excavation

Global Id: T0605901043
Action Type: REMEDIATION
Date: 01/01/1950
Action: Soil Vapor Extraction (SVE)

Global Id: T0605901043
Action Type: ENFORCEMENT
Date: 01/13/2012
Action: Staff Letter

Global Id: T0605901043
Action Type: ENFORCEMENT
Date: 01/03/2007
Action: Staff Letter

Global Id: T0605901043
Action Type: ENFORCEMENT
Date: 02/24/2006
Action: Staff Letter

Global Id: T0605901043
Action Type: ENFORCEMENT
Date: 11/07/2005
Action: Warning Letter

Global Id: T0605901043
Action Type: ENFORCEMENT
Date: 07/05/2005
Action: Staff Letter

Global Id: T0605901043
Action Type: ENFORCEMENT
Date: 06/13/2011
Action: Staff Letter

Global Id: T0605901043
Action Type: RESPONSE
Date: 02/05/2013
Action: Request for Closure - Regulator Responded

Global Id: T0605901043
Action Type: ENFORCEMENT
Date: 12/10/2008
Action: Staff Letter

TOSCO - 76 #5280 (Continued) **U000035411**

Global Id: T0605901043
Action Type: ENFORCEMENT
Date: 02/25/2009
Action: Staff Letter

Global Id: T0605901043
Action Type: Other
Date: 01/01/1950
Action: Leak Discovery

Global Id: T0605901043
Action Type: ENFORCEMENT
Date: 05/10/2013
Action: Staff Letter

Global Id: T0605901043
Action Type: Other
Date: 01/01/1950
Action: Leak Reported

ORANGE CO. LUST:
Region: ORANGE
Facility Id: 90UT055
Current Status: Remedial Action
Released Substance: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
Date Closed: Not reported
Case Type: Other Ground Water
Record ID: RO0002222

Notify 65:
Date Reported: Not reported
Staff Initials: Not reported
Board File Number: Not reported
Facility Type: Not reported
Discharge Date: Not reported
Incident Description: 90101

97
North
1/2-1
0.784 mi.
4137 ft.

RALPH GRAY TRUCKING COMPANY **CA HIST Cal-Sites** **S101272795**
SOWELL AVENUE AND GOLDEN WEST ST **CA ENVIROSTOR** **N/A**
WESTMINSTER, CA 92683

Relative:
Higher

Actual:
31 ft.

Calsite:
Facility ID: 30130031
Region: 4
Region Name: CYPRESS
Branch: SB
Branch Name: SO CAL - CYPRESS
File Name: Not reported
State Senate District: 01011988
Status: CERTIFIED AS HAVING BEEN REMEDIED SATISFACTORILY UNDER DTSC OVERSIGHT
Status Name: CERTIFIED
Lead Agency: DTSC
Lead Agency: DEPT OF TOXIC SUBSTANCES CONTROL
Facility Type: NPJF

RALPH GRAY TRUCKING COMPANY (Continued) **S101272795**

Type Name:	NPL SITE, JOINT STATE/FEDERAL-FUNDED
NPL:	Delisted
SIC Code:	13
SIC Name:	OIL & GAS EXTRACTION
Access:	Not reported
Cortese:	Not reported
Hazardous Ranking Score:	Not reported
Date Site Hazard Ranked:	Not reported
Groundwater Contamination:	Confirmed
Staff Member Responsible for Site:	JCULLY
Supervisor Responsible for Site:	Not reported
Region Water Control Board:	SA
Region Water Control Board Name:	SANTA ANA
Lat/Long Direction:	Not reported
Lat/Long (dms):	0 0 0 / 0 0 0
Lat/long Method:	Not reported
Lat/Long Description:	Not reported
State Assembly District Code:	68
State Senate District Code:	35
Facility ID:	30130031
Activity:	DISC
Activity Name:	DISCOVERY
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	12091981
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	CERT
Definition of Status:	CERTIFIED
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	30130031
Activity:	SS
Activity Name:	SITE SCREENING
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	10271986
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	CERT
Definition of Status:	CERTIFIED
Liquids Removed (Gals):	0

RALPH GRAY TRUCKING COMPANY (Continued) **S101272795**

Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	30130031
Activity:	ERA
Activity Name:	EXPEDITED RESPONSE ACTION
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	10311990
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	CERT
Definition of Status:	CERTIFIED
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	30130031
Activity:	ORDER
Activity Name:	I/SE, IORSE, FFA, FFSRA, VCA, EA
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	02281991
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	CERT
Definition of Status:	CERTIFIED
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0

RALPH GRAY TRUCKING COMPANY (Continued) **S101272795**

Unknown Type:	0
Facility ID:	30130031
Activity:	ERA
Activity Name:	EXPEDITED RESPONSE ACTION
AWP Code:	SEEP
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	10181991
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	CERT
Definition of Status:	CERTIFIED
Liquids Removed (Gals):	1
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	ANNUAL EXPEDITED REMOVAL OF HAZARDOUS WASTE SEEPS THAT OCCUR AT THESITE DURING LATE SUMMERS DUE TO THE HIGHER ATMOSPHERIC TEMPERATURESAND INCREASED FLUIDITY OF THE WASTE MATERIAL.
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	30130031
Activity:	RIFS
Activity Name:	REMEDIAL INVESTIGATION / FEASIBILITY STUDY
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	09301992
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	CERT
Definition of Status:	CERTIFIED
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	30130031
Activity:	FRIFS
Activity Name:	FOCUSED REMEDIAL INVESTIGATION/FEASIBILITY STUDY
AWP Code:	EE/CA
Proposed Budget:	0
AWP Completion Date:	Not reported

RALPH GRAY TRUCKING COMPANY (Continued) **S101272795**

Revised Due Date:	Not reported
Comments Date:	09301993
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	CERT
Definition of Status:	CERTIFIED
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	30130031
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	01121996
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	CERT
Definition of Status:	CERTIFIED
Liquids Removed (Gals):	59493
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	EXCAVATION AND OFFSITE DISPOSAL OF 59,493 TONS OF BURIEDHAZARDOUS WASTES AND ASSOCIATED CONTAMINATED SOIL.
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	30130031
Activity:	PRP
Activity Name:	POTENTIAL RESPONSIBLE PARTY SEARCH
AWP Code:	REVW
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	02221999
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	CERT
Definition of Status:	CERTIFIED
Liquids Removed (Gals):	0

RALPH GRAY TRUCKING COMPANY (Continued) **S101272795**

Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	30130031
Activity:	CERT
Activity Name:	CERTIFICATION
AWP Code:	NPL
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	11162000
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	CERT
Definition of Status:	CERTIFIED
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	30130031
Activity:	COST
Activity Name:	COST RECOVERY
AWP Code:	NFCRA
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	11052001
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	CERT
Definition of Status:	CERTIFIED
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0

RALPH GRAY TRUCKING COMPANY (Continued) **S101272795**

Unknown Type: 0
Alternate Address: SOWELL AVENUE & KATHY STREET
Alternate City,St,Zip: WESTMINSTER, CA 92683
Alternate Address: SOWELL AVENUE AND GOLDEN WEST ST
Alternate City,St,Zip: WESTMINSTER, CA 92683
Background Info: Westminster Tract No. 2633 is a residential housing tract consisting of 70 single family homes near the intersection of Sowell Avenue and Goldenwest Street. Wastes from local oil fields and refineries were buried beneath the backyards of several homes in the tract prior to residential development.
Not reported
Petroleum sludges and acidic wastes were believed to have been disposed of during the 1930's through the 1950's when the site was owned by the Murdy Dairy Property and Ralph Gray Trucking Company. Reports indicate sketchy, conflicting historical information which describes between one to four original sumps where waste material was disposed. During development of the housing tract in 1959, the wastes were excavated and redisposed into two discrete locations along backyard fence-lines during the final construction of the homes. The buried wastes have been found seeping into the surface of the yards within the tract. A sampling of the buried and seeping materials have shown them to be composed of petroleum hydrocarbons, polynuclear aromatic hydrocarbons (PNAs), and volatile aromatic hydrocarbons, including benzene. The substances have been found to be acidic, having a pH generally less than 2.0. The wastes have also been found emitting low levels of volatile aromatic hydrocarbon vapors and sulfur dioxide and hydrogen sulfide gases, creating unpleasant odors.
Not reported
A site investigation in Summer, 1987 verified the presence of waste materials beneath residential yards. Although the investigation showed that the levels of vapors emitted from the wastes do not pose an immediate health hazard, the long-term health effects are uncertain. The investigation suggests, but does not confirm, that wastes are not migrating to groundwater. There is a periodic threat of direct contact posed by the acidic waste materials seeping into backyards.
Not reported
Preliminary site investigative activities and removal actions to remove seepage material from the yards were completed in November 1987.
Comments Date: 01011988
Comments: This is the date the site was first listed AWP pursuant to
Comments Date: 01011988
Comments: Section 25356.
Comments Date: 01121996
Comments: The Removal Action for the Ralph Gray Trucking Company
Comments Date: 01121996
Comments: Superfund Site was completed under the oversight of DTSC.
Comments Date: 01121996
Comments: Activities included the excavation and offsite disposal of
Comments Date: 01121996
Comments: 59,493 tons of buried hazardous wastes and associated con-
Comments Date: 01121996
Comments: taminated soil from a residential neighborhood in Westmin-
Comments Date: 01121996

RALPH GRAY TRUCKING COMPANY (Continued) **S101272795**

Comments:	ster. The activities took approximately one year between
Comments Date:	01121996
Comments:	August 1994 and August 1995 with the completion of backfil-
Comments Date:	01121996
Comments:	ling of the final excavation. The waste was transported to
Comments Date:	01121996
Comments:	Kettleman Hills (waste/soil); and Santa Fe Springs and
Comments Date:	01121996
Comments:	McKitterick (water). The waste consisted of acidic tarry
Comments Date:	01121996
Comments:	petroleum wastes originally deposited at the site in the
Comments Date:	01121996
Comments:	1930's, and subsequently dug up and buried in trenches
Comments Date:	01121996
Comments:	at the site in the 1950's. The wastes contained volatile
Comments Date:	01121996
Comments:	aromatic hydrocarbons, such as benzene, ethylbenzene,
Comments Date:	01121996
Comments:	toluene and xylene, polycyclic aromatic hydrocarbons,
Comments Date:	01121996
Comments:	and sulfur compounds. Complete removal of wastes was
Comments Date:	01121996
Comments:	ensured by visual inspection and post-remediation
Comments Date:	01121996
Comments:	sampling. U.S. EPA is continuing with property
Comments Date:	01121996
Comments:	restoration activities.
Comments Date:	02221999
Comments:	Reviewed files, and developed a chronology of site ownership
Comments Date:	02221999
Comments:	based on Orange County Recorder records. Also made a
Comments Date:	02221999
Comments:	chronology of PRP search activities for this site. Wrote a
Comments Date:	02221999
Comments:	memo to the file of this chronology.
Comments Date:	04191996
Comments:	EPA continues to complete work on residences. Little ground-
Comments Date:	04191996
Comments:	water OU is planned for fiscal year 1996/1997. DTSC approved
Comments Date:	04191996
Comments:	the groundwater workplan in February 1996.
Comments Date:	05231989
Comments:	EPA completed Listing Site Inspection (LSI) & will list site
Comments Date:	07251991
Comments:	A former disposal area for petroleum wastes and acidic
Comments Date:	07251991
Comments:	sludges, the tract encompasses approximately twenty-three
Comments Date:	07251991
Comments:	acres of a residential area located just north of the San
Comments Date:	07251991
Comments:	Diego Freeway (I-405). Contaminants include VOCs and TPHs.
Comments Date:	09011987
Comments:	Site reported for Proposition 65.
Comments Date:	09131991
Comments:	ERA: Annual expedited removal of hazardous waste seeps that
Comments Date:	09131991
Comments:	occur at the site during late summer due to the higher

RALPH GRAY TRUCKING COMPANY (Continued) **S101272795**

Comments Date:	09131991
Comments:	atmospheric temperatures and increased fluidity of the
Comments Date:	09131991
Comments:	waste material.
Comments Date:	10181991
Comments:	Site is proposed for listing on the National Priorities
Comments Date:	10181991
Comments:	list.
Comments Date:	10201992
Comments:	Site was listed on NPL on October 14, 1992.
Comments Date:	10271986
Comments:	Site Screening Done: Preliminary Assessment recommended.
Comments Date:	11162000
Comments:	DTSC has determined that all appropriate response actions have
Comments Date:	11162000
Comments:	been completed, that all acceptable engineering practices were
Comments Date:	11162000
Comments:	implemented and that no further removal/remedial action is
Comments Date:	11162000
Comments:	necessary. This site has been certified.
Comments Date:	12091981
Comments:	Facility Identified: Tip - tar oozing out of hole at 7200
Comments Date:	12091981
Comments:	Sowell Avenue in 1978.
Comments Date:	12091981
Comments:	Records Search: 04/06/59 RWQCB - developer notified of waste
Comments Date:	12091981
Comments:	materials on site of tract development. Sump could remain
Comments Date:	12091981
Comments:	onsite if wastes would not come in contact with groundwater.
Comments Date:	12091981
Comments:	Warned that waste had objectionable characteristics which
Comments Date:	12091981
Comments:	could cause other problems. 04/23/59 RWQCB notified City
Comments Date:	12091981
Comments:	of wastes. 03/15/60 City Tract Map - sump material excavated
Comments Date:	12091981
Comments:	and deposited under backyards of homes on south side of
Comments Date:	12091981
Comments:	Sowell and west of Allen. Eleven homes affected. 05/21/65
Comments Date:	12091981
Comments:	City received complaints of tar seepage. No record of
Comments Date:	12091981
Comments:	corrections. 01/01/74 City inspector traces odor complaints
Comments Date:	12091981
Comments:	to a pool construction project at 7152 Sowell Avenue. A
Comments Date:	12091981
Comments:	band of tar was visible at 10'.
Comments Date:	12141981
Comments:	Air Quality Mgmt District (AQMD): Odor problem/dying plants
Comments Date:	12141981
Comments:	in mid-1960s.
Comments Date:	12151981
Comments:	1947 & 1955 air photos show ponds.
Comments Date:	12181981
Comments:	Facility Drive-By: Affected homes appear occupied. Backyard
Comments Date:	12181981

RALPH GRAY TRUCKING COMPANY (Continued) **S101272795**

Comments:	not visible to determine if vegetation is stressed.
Comments Date:	12211981
Comments:	Old sump was approximately seven acres in size.
ID Name:	CALSTARS CODE
ID Value:	400169
ID Name:	EPA IDENTIFICATION NUMBER
ID Value:	CAD981995947
ID Name:	HWIS IDENTIFICATION CODE
ID Value:	CAD981973852
ID Name:	BEP DATABASE PCODE
ID Value:	P42104
Alternate Name:	WESTMINSTER TRACT 2633RALPH GRAY TRUCKING CO.RALPH GRAY TRUCKING COMPANYMURDY DAIRY FARM
Special Programs Code:	MSCA
Special Programs Name:	MULTI-SITE COOPERATIVE AGREEMENT

ENVIROSTOR:

Site Type:	Federal Superfund
Site Type Detailed:	State Response or NPL
Acres:	4.66
NPL:	DELISTED
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Joseph Cully
Supervisor:	Douglas Bautista
Division Branch:	Cleanup Cypress
Facility ID:	30130031
Site Code:	400169
Assembly:	72
Senate:	34
Special Program:	EPA - Multi-Site Cooperative Agreement
Status:	Certified
Status Date:	01/01/1988
Restricted Use:	NO
Site Mgmt. Req.:	NONE SPECIFIED
Funding:	Responsible Party
Latitude:	33.74944
Longitude:	-118.0069
APN:	NONE SPECIFIED
Past Use:	ILLEGAL DUMPING, OIL FIELD
Potential COC:	Benzene, Hydrogen sulfide, Sulfuric Acid
Confirmed COC:	Benzene, Hydrogen sulfide, Sulfuric Acid, Sulfuric Acid, Hydrogen sulfide, Benzene
Potential Description:	SOIL
Alias Name:	MURDY DAIRY FARM
Alias Type:	Alternate Name
Alias Name:	RALPH GRAY TRUCKING CO.
Alias Type:	Alternate Name
Alias Name:	WESTMINSTER TRACT 2633
Alias Type:	Alternate Name
Alias Name:	CAD981995947
Alias Type:	EPA Identification Number
Alias Name:	110009268390
Alias Type:	EPA (FRS #)
Alias Name:	SLT8R2684158
Alias Type:	GeoTracker Global ID
Alias Name:	CAD981973852

RALPH GRAY TRUCKING COMPANY (Continued) **S101272795**

Alias Type: HWTS Identification Code
Alias Name: P42104
Alias Type: PCode
Alias Name: 400169
Alias Type: Project Code (Site Code)
Alias Name: 30130031
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 01/12/1996
Comments: The Removal Action for the Ralph Gray Trucking Company Superfund Site was completed under the oversight of DTSC. Activities included the excavation and offsite disposal of 59,493 tons of buried hazardous wastes and associated con- taminated soil from a residential neighborhood in Westmin- ster. The activities took approximately one year between August 1994 and August 1995 with the completion of backfil- ling of the final excavation. The waste was transported to Kettleman Hills (waste/soil); and Santa Fe Springs and McKitterick (water). The waste consisted of acidic tarry petroleum wastes originally deposited at the site in the 1930's, and subsequently dug up and buried in trenches at the site in the 1950's. The wastes contained volatile aromatic hydrocarbons, such as benzene, ethylbenzene, toluene and xylene, polycyclic aromatic hydrocarbons, and sulfur compounds. Complete removal of wastes was ensured by visual inspection and post-remediation sampling. U.S. EPA is continuing with property restoration activities.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 09/30/1993
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation / Feasibility Study
Completed Date: 09/30/1992
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 10/18/1991
Comments: Site is proposed for listing on the National Priorities list.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 10/31/1990
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 10/27/1986

RALPH GRAY TRUCKING COMPANY (Continued) **S101272795**

Comments: Site Screening Done: Preliminary Assessment recommended.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 11/16/2000
Comments: DTSC has determined that all appropriate response actions have been completed, that all acceptable engineering practices were implemented and that no further removal/remedial action is necessary. This site has been certified.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fence & Post Order
Completed Date: 02/28/1991
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 12/09/1981
Comments: Facility Identified: Tip - tar oozing out of hole at 7200 Sowell Avenue in 1978. Records Search: 04/06/59 RWQCB - developer notified of waste materials on site of tract development. Sump could remain onsite if wastes would not come in contact with groundwater. Warned that waste had objectionable characteristics which could cause other problems. 04/23/59 RWQCB notified City of wastes. 03/15/60 City Tract Map - sump material excavated and deposited under backyards of homes on south side of Sowell and west of Allen. Eleven homes affected. 05/21/65 City received complaints of tar seepage. No record of corrections. 01/01/74 City inspector traces odor complaints to a pool construction project at 7152 Sowell Avenue. A band of tar was visible at 10'.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

98
North
1/2-1
0.790 mi.
4170 ft.

RALPH GRAY TRUCKING CO.
SOWELL AVE & GOLDEN WEST ST
WESTMINSTER, CA 92683

Delisted NPL **1000415037**
CERCLIS **CAD981973852**
RCRA-SQG
FINDS
CA HAZNET

Relative:
Higher

Actual:
30 ft.

Delisted NPL:
EPA ID: CAD981995947
Site ID: 0902521
EPA Region: 09
Federal: No
Deleted Date: 2004-09-28 00:00:00

RALPH GRAY TRUCKING CO. (Continued) **1000415037**

Site Details:
Site Name: RALPH GRAY TRUCKING CO.
Site Status: Deleted
Site Zip: 92683
Site City: WESTMINSTER
Site State: CA
Federal Site: No
Site County: ORANGE
EPA Region: 09
Date Proposed: 07/29/91
Date Deleted: 9/28/2004
Date Finalized: 10/14/92

Substance Details:
NPL Status: Deleted from the Final NPL
Substance ID: U019
Substance: BENZENE
CAS #: 71-43-2
Pathway: GROUND WATER PATHWAY
Scoring: 3

NPL Status: Deleted from the Final NPL
Substance ID: U019
Substance: BENZENE
CAS #: 71-43-2
Pathway: SOIL EXPOSURE PATHWAY
Scoring: 2

NPL Status: Deleted from the Final NPL
Substance ID: U019
Substance: BENZENE
CAS #: 71-43-2
Pathway: SURFACE WATER PATHWAY
Scoring: 4

NPL Status: Deleted from the Final NPL
Substance ID: U165
Substance: NAPHTHALENE
CAS #: 91-20-3
Pathway: AIR PATHWAY
Scoring: 3

NPL Status: Deleted from the Final NPL
Substance ID: U165
Substance: NAPHTHALENE
CAS #: 91-20-3
Pathway: SOIL EXPOSURE PATHWAY
Scoring: 2

NPL Status: Deleted from the Final NPL
Substance ID: U165
Substance: NAPHTHALENE
CAS #: 91-20-3
Pathway: SURFACE WATER PATHWAY
Scoring: 2

RALPH GRAY TRUCKING CO. (Continued) **1000415037**

NPL Status: Deleted from the Final NPL
Substance ID: U220
Substance: TOLUENE
CAS #: 108-88-3
Pathway: SOIL EXPOSURE PATHWAY
Scoring: 2

NPL Status: Deleted from the Final NPL
Substance ID: U220
Substance: TOLUENE
CAS #: 108-88-3
Pathway: SURFACE WATER PATHWAY
Scoring: 2

NPL Status: Deleted from the Final NPL
Substance ID: U239
Substance: XYLENE
CAS #: 1330-20-7
Pathway: SOIL EXPOSURE PATHWAY
Scoring: 2

NPL Status: Deleted from the Final NPL
Substance ID: U239
Substance: XYLENE
CAS #: 1330-20-7
Pathway: SURFACE WATER PATHWAY
Scoring: 2

NPL Status: Deleted from the Final NPL
Substance ID: Not reported
Substance: Not reported
CAS #: Not reported
Pathway: Not reported
Scoring: Not reported

NPL Status: Deleted from the Final NPL
Substance ID: A038
Substance: NICKEL AND COMPOUNDS
CAS #: Not reported
Pathway: NO PATHWAY INDICATED
Scoring: 1

NPL Status: Deleted from the Final NPL
Substance ID: C049
Substance: ETHYLBENZENE
CAS #: 100-41-4
Pathway: SOIL EXPOSURE PATHWAY
Scoring: 2

NPL Status: Deleted from the Final NPL
Substance ID: C049
Substance: ETHYLBENZENE
CAS #: 100-41-4
Pathway: SURFACE WATER PATHWAY
Scoring: 2

NPL Status: Deleted from the Final NPL

RALPH GRAY TRUCKING CO. (Continued) **1000415037**

Substance ID: C178
Substance: COPPER AND COMPOUNDS
CAS #: Not reported
Pathway: NO PATHWAY INDICATED
Scoring: 1

NPL Status: Deleted from the Final NPL
Substance ID: C332
Substance: PHENANTHRENE
CAS #: 85-01-8
Pathway: SOIL EXPOSURE PATHWAY
Scoring: 2

NPL Status: Deleted from the Final NPL
Substance ID: C332
Substance: PHENANTHRENE
CAS #: 85-01-8
Pathway: SURFACE WATER PATHWAY
Scoring: 2

NPL Status: Deleted from the Final NPL
Substance ID: C463
Substance: BENZOPYRENE
CAS #: 73467-76-2
Pathway: SOIL EXPOSURE PATHWAY
Scoring: 4

NPL Status: Deleted from the Final NPL
Substance ID: C463
Substance: BENZOPYRENE
CAS #: 73467-76-2
Pathway: SURFACE WATER PATHWAY
Scoring: 4

NPL Status: Deleted from the Final NPL
Substance ID: D004
Substance: ARSENIC
CAS #: 7440-38-2
Pathway: NO PATHWAY INDICATED
Scoring: 1

NPL Status: Deleted from the Final NPL
Substance ID: D007
Substance: CHROMIUM
CAS #: 7440-47-3
Pathway: NO PATHWAY INDICATED
Scoring: 1

NPL Status: Deleted from the Final NPL
Substance ID: D008
Substance: LEAD (PB)
CAS #: 7439-92-1
Pathway: GROUND WATER PATHWAY
Scoring: 3

NPL Status: Deleted from the Final NPL
Substance ID: D008

RALPH GRAY TRUCKING CO. (Continued) **1000415037**

Substance: LEAD (PB)
CAS #: 7439-92-1
Pathway: SOIL EXPOSURE PATHWAY
Scoring: 4

NPL Status: Deleted from the Final NPL
Substance ID: D008
Substance: LEAD (PB)
CAS #: 7439-92-1
Pathway: SURFACE WATER PATHWAY
Scoring: 4

Summary Details:

Conditions at Proposal July 29, 1991): The Ralph Gray Trucking Co. site is in a 23-acre residential area near the intersection of Sowell Avenue and Golden West Street, north of the San Diego Freeway in Westminster, Orange County, California.The site was originally proposed under the name Westminster Tract 2633. From the 1930s through the 1950s, portions of the site were used for disposal of sulfuric acid sludge and oil refinery wastes in unlined surface impoundments. Investigations subsequent to proposal indicate that Ralph Gray Trucking Co. transported the waste materials to the impoundments, which the company owned and operated. In 1936, the company and its owner were convicted in the Justice Court of HuntingtonBeach Township for maintaining a public nuisance at the site. During the late 1950s, Hint Development Corp. purchased the site to develop a housing tract. When development began, a tar sump containing wastes once stored on-site was discovered. Hint Development excavated the wastes and placed them into three unlined redisposal trenches also located on-site. After the tract had been built, residents living in houses near the suspected locations of the redisposal trenches complained of black tar-like seeps in backyards, foul odors, and damage to fences, lawns, and patios due to unusual settling of the ground surface. In 1986, a resident reported that a black tarry material was oo ing through cracks from thesides of her pool. The waste material is apparently gradually moving upward through the soil column from the redisposal trenches, especially at higher temperatures. Additionally, construction of the houses has disturbed the soils underlying the site, further encouraging the upward movement of the wastes. Investigations conducted by the California Department of Toxic Substances Control CDTSC) in 1986-87 revealed extensive contamination at the site. CDTSC determined that the waste seeps and some soil samples contained various organic compounds, including ben ene, ethylben ene, toluene, fluorene, naphthalene, and phenanthrene, as well as low levels of lead. The seeps were highly acidic pH 1.8 to 2.1). Ground water beneath the site is as shallow as 7 feet below ground surface. Toluene and ethylben ene have been detected in ground water collected from this upper aquifer. A lower aquifer is approximately 130 feet below ground surface. Possible interconnection between the two aquifers is not known. Within 4 miles of the site, the lower aquifer provides drinking water to an estimated 67,600 people. The closest well is less than one- quarter mile from the site. During 1987-91, CDTSC excavated materials seeping to the surface in the backyards of several residences. In February 1990, CDTSC completed a Phase I Remedial Investigation, further characteri ing the extent of wastes in the three redisposal trenches. EPA investigatedthe site in 1989. The investigation included interpretation of historical photographs of the facility and sampling of wastes, soil, ground water, surface water, and air. EPA verified that the waste seeps are migrating to the surface from theredisposal trenches, and that soils are contaminated with lead apparently from dumping of gasoline) and various organic chemicals. In addition,

RALPH GRAY TRUCKING CO. (Continued) **1000415037**

contaminant migration into a nearby flood control channel was photographically documented. Seal Beach Natural Wildlife Refuge, within 4 miles of the site, includes wetlands and is an important habitat for two endangered species. Commercial fishing occurs in the Pacific Ocean within 10 miles of the refuge. Status October 1992):In October 1991, EPA started a search to identify parties potentially responsible for wastes associated with the site and will solicit the participation of those identified in cleaning up the site. The description of the site release) isbased on information available at the time the site was scored. The description may change as additional information is gathered on the sources and extent of contamination. See FR 5600, February 11, 1991 or subsequent FR notices.)

Site Status Details:

NPL Status:	Final
Proposed Date:	07/29/1991
Final Date:	10/14/1992
Deleted Date:	Not reported

Narratives Details:

NPL Name:	RALPH GRAY TRUCKING CO.
City:	WESTMINSTER
State:	CA

CERCLIS:

Site ID:	0902521
EPA ID:	CAD981995947
Facility County:	ORANGE
Short Name:	RALPH GRAY TRUCKING CO
Congressional District:	45
IFMS ID:	09X3
SMSA Number:	0360
USGC Hydro Unit:	18070201
Federal Facility:	Not a Federal Facility
DMNSN Number:	23.00000
Site Orphan Flag:	N
RCRA ID:	Not reported
USGS Quadrangle:	Not reported
Site Init By Prog:	Not reported
NFRAP Flag:	Not reported
Parent ID:	Not reported
RST Code:	Not reported
EPA Region:	09
Classification:	Not reported
Site Settings Code:	SU
NPL Status:	Deleted from the Final NPL
DMNSN Unit Code:	ACRE
RBRAC Code:	Not reported
RResp Fed Agency Code:	Not reported
Non NPL Status:	Not reported
Non NPL Status Date:	/ /
Site Fips Code:	06059
CC Concurrence Date:	08/31/00
CC Concurrence FY:	2000
Alias EPA ID:	Not reported
Site FUDS Flag:	Not reported

RALPH GRAY TRUCKING CO. (Continued) **1000415037**

CERCLIS Site Contact Name(s):

Contact ID:	9000171.00000
Contact Name:	Not reported
Contact Tel:	Not reported
Contact Title:	On-Scene Coordinator (OSC)
Contact Email:	Not reported
Contact ID:	9270378.00000
Contact Name:	Not reported
Contact Tel:	Not reported
Contact Title:	Remedial Project Manager (RPM)
Contact Email:	Not reported
Contact ID:	9271184.00000
Contact Name:	Not reported
Contact Tel:	Not reported
Contact Title:	Site Assessment Manager (SAM)
Contact Email:	Not reported
Contact ID:	13003854.00000
Contact Name:	Not reported
Contact Tel:	Not reported
Contact Title:	Site Assessment Manager (SAM)
Contact Email:	Not reported
Contact ID:	13003858.00000
Contact Name:	Not reported
Contact Tel:	Not reported
Contact Title:	Site Assessment Manager (SAM)
Contact Email:	Not reported
Contact ID:	13004003.00000
Contact Name:	Not reported
Contact Tel:	Not reported
Contact Title:	Site Assessment Manager (SAM)
Contact Email:	Not reported

CERCLIS Site Alias Name(s):

Alias ID:	101
Alias Name:	WESTMINSTER TRACT
Alias Address:	Not reported
	CA
Alias ID:	102
Alias Name:	RALPH GRAY TRUCKING CO
Alias Address:	Not reported
	Not reported
Alias ID:	103
Alias Name:	RALPH GRAY TRUCKING CO.
Alias Address:	SOWELL AVE & GOLDEN WEST ST
	WESTMINSTER, CA 92683
Alias ID:	101
Alias Comments:	PREVIOUS EPA ID# AZD 981 416 977

Site Description: Not reported

CERCLIS Assessment History:

Action Code:	001

RALPH GRAY TRUCKING CO. (Continued) **1000415037**

Action: DISCOVERY
Date Started: / /
Date Completed: 03/01/87
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: State, Fund Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: EXPANDED SITE INSPECTION
Date Started: / /
Date Completed: 05/31/89
Priority Level: Recommended for HRS Scoring
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: SITE INSPECTION
Date Started: / /
Date Completed: 09/15/89
Priority Level: Higher priority for further assessment
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: PRELIMINARY ASSESSMENT
Date Started: / /
Date Completed: 09/15/89
Priority Level: Higher priority for further assessment
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: PROPOSAL TO NATIONAL PRIORITIES LIST
Date Started: / /
Date Completed: 07/29/91
Priority Level: Not reported

RALPH GRAY TRUCKING CO. (Continued) **1000415037**

Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: TREATABILITY STUDY
Date Started: 03/23/92
Date Completed: 07/17/92
Priority Level: Not reported
Operable Unit: OU01
Primary Responsibility: EPA Fund-Financed
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: FINAL LISTING ON NATIONAL PRIORITIES LIST
Date Started: / /
Date Completed: 10/14/92
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: REMOVAL ASSESSMENT
Date Started: / /
Date Completed: 12/10/92
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: EPA Fund-Financed
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: ENGINEERING EVALUATION/COST ANALYSIS
Date Started: / /
Date Completed: 08/18/93
Priority Level: Not reported
Operable Unit: OU01
Primary Responsibility: EPA Fund-Financed
Planning Status: Not reported
Urgency Indicator: Not reported

RALPH GRAY TRUCKING CO. (Continued) **1000415037**

Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: REMEDIAL DESIGN
Date Started: 06/19/93
Date Completed: 09/29/93
Priority Level: Not reported
Operable Unit: OU01
Primary Responsibility: EPA Fund-Financed
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: COMBINED REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 08/30/92
Date Completed: 04/08/94
Priority Level: Not reported
Operable Unit: OU01
Primary Responsibility: EPA Fund-Financed
Planning Status: Project Suspended
Urgency Indicator: Not reported
Action Anomaly: Other Completion Anomaly

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: ADMINISTRATIVE RECORDS
Date Started: / /
Date Completed: 04/08/94
Priority Level: Not reported
Operable Unit: OU01
Primary Responsibility: EPA Fund-Financed
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: STATE SUPPORT AGENCY COOPERATIVE AGREEMENT
Date Started: 09/30/91
Date Completed: 01/13/99
Priority Level: Not reported
Operable Unit: OU01
Primary Responsibility: Federal Enforcement
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: REMOVAL
Date Started: 08/23/94

RALPH GRAY TRUCKING CO. (Continued) **1000415037**

Date Completed:	08/21/00
Priority Level:	Cleaned up
Operable Unit:	OU01
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Primary
Urgency Indicator:	Time Critical
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	CLOSE OUT REPORT
Date Started:	/ /
Date Completed:	08/31/00
Priority Level:	Not reported
Operable Unit:	OU01
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Not reported
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	002
Action:	REMOVAL
Date Started:	04/28/03
Date Completed:	09/16/03
Priority Level:	Cleaned up
Operable Unit:	SITEWIDE
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Not reported
Urgency Indicator:	Time Critical
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	001
Action:	DELETION FROM NATIONAL PRIORITIES LIST
Date Started:	/ /
Date Completed:	09/28/04
Priority Level:	Not reported
Operable Unit:	SITEWIDE
Primary Responsibility:	EPA Fund-Financed
Planning Status:	Primary
Urgency Indicator:	Not reported
Action Anomaly:	Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code:	002
Action:	COMBINED REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started:	06/19/93
Date Completed:	/ /
Priority Level:	Not reported
Operable Unit:	OU02
Primary Responsibility:	EPA Fund-Financed

RALPH GRAY TRUCKING CO. (Continued) **1000415037**

Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Other Completion Anomaly

For detailed financial records, contact EDR for a Site Report.:

Federal Register Details:
Fed Register Date: 09/28/04
Fed Register Volume: 69
Page Number: 45601

Fed Register Date: 10/14/92
Fed Register Volume: 57
Page Number: 47181

Fed Register Date: 07/29/91
Fed Register Volume: 56
Page Number: 35840

Click this hyperlink while viewing on your computer to access
366 additional US CERCLIS Financial: record(s) in the EDR Site Report.

RCRA-SQG:
Date form received by agency: 09/01/1996
Facility name: WESTMINSTER TRACT NO 2633 SITE
Facility address: SOWELL AVE & KATHY ST
WESTMINSTER, CA 92683
EPA ID: CAD981973852
Mailing address: DHS TSCD FIRST HUNDRED SEVENTH
LOS ANGELES, CA 90012
Contact: Not reported
Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: RESIDENTIAL DEVELOPMENT
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED

RALPH GRAY TRUCKING CO. (Continued) **1000415037**

Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 05/07/1987
Facility name: WESTMINSTER TRACT NO 2633 SITE
Classification: Large Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110009268390

Environmental Interest/Information System

California Department of Toxic Substances Control EnviroStor System (DTSC-EnviroStor) is an online search and Geographic Information System (GIS) tool for identifying sites that have known contamination or sites for which there may be reasons to investigate further. The EnviroStor database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites.

CERCLIS (Comprehensive Environmental Response, Compensation, and Liability Information System) is the Superfund database that is used to support management in all phases of the Superfund program. The system contains information on all aspects of hazardous waste sites, including an inventory of sites, planned and actual site activities, and financial information.

HAZNET:

RALPH GRAY TRUCKING CO. (Continued) **1000415037**

Year:	1997
Gepaid:	CAD981973852
Contact:	Not reported
Telephone:	0000000000
Mailing Name:	Not reported
Mailing Address:	DHS TSCD 107 S BROADWAY
Mailing City,St,Zip:	LOS ANGELES, CA 900120000
Gen County:	Not reported
TSD EPA ID:	CAD028409019
TSD County:	Not reported
Waste Category:	Aqueous solution with total organic residues less than 10 percent
Disposal Method:	Treatment, Tank
Tons:	11.0922
Facility County:	Orange

Year:	1997
Gepaid:	CAD981973852
Contact:	Not reported
Telephone:	0000000000
Mailing Name:	Not reported
Mailing Address:	DHS TSCD 107 S BROADWAY
Mailing City,St,Zip:	LOS ANGELES, CA 900120000
Gen County:	Not reported
TSD EPA ID:	CAD028409019
TSD County:	Not reported
Waste Category:	Other organic solids
Disposal Method:	Transfer Station
Tons:	.1500
Facility County:	Orange

Count: 9 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
HUNTINGTON BEACH	1007372483	KRIK WELL #80	ASCON LANDFILL		CERCLIS, PRP
HUNTINGTON BEACH	1006828968	CITY OF HUNTINGTON BEACH	BTWN GOLDENWEST & GOTHARD S OF		US MINES, FINDS
HUNTINGTON BEACH	1007443886	GOTHARD STREET CLOSED LANDFILL	GOTHARD STREET		ODI
HUNTINGTON BEACH	S106117678	HUNTINGTON BEACH LANDFILL	0 GOTHARD @ TALBERT	92647	CA LUST
WEST MINISTER	S112845034	1X CITY OF WEST MINISTER	15061 MORAN	92683	CA HAZNET
WESTMINSTER	S112877189	GOLDEN WESTMINSTER SPECIALTY CTR	15300 GOLDEN WEST	92683	CA HAZNET
WESTMINSTER	S112929484	GOLDEN WESTMINSTER CENTER	15162 GOLDENWEST	92683	CA HAZNET
WESTMINSTER	S113087405	WEST STATE CLEANERS	15102 W STATE	92683	CA HAZNET
WESTMINSTER	S113069860	WEST STATE CLEANERS	15102 WEST STATE	92683	CA HAZNET

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 05/09/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 62

Source: EPA
Telephone: N/A
Last EDR Contact: 10/11/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 05/09/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 62

Source: EPA
Telephone: N/A
Last EDR Contact: 10/11/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

DELISTED NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 05/09/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 62

Source: EPA
Telephone: N/A
Last EDR Contact: 10/11/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Quarterly

Federal CERCLIS list

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 05/29/2013
Date Made Active in Reports: 08/09/2013
Number of Days to Update: 72

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 10/18/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Quarterly

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 10/09/2012
Date Made Active in Reports: 12/20/2012
Number of Days to Update: 72

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 10/11/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Varies

Federal CERCLIS NFRAP site List

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 05/29/2013
Date Made Active in Reports: 08/09/2013
Number of Days to Update: 72

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 10/18/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 06/17/2013
Date Data Arrived at EDR: 06/21/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 104

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 06/17/2013
Date Data Arrived at EDR: 06/21/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 104

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Varies

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/09/2005
Date Data Arrived at EDR: 12/11/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 31

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 08/15/2013
Next Scheduled EDR Contact: 09/02/2013
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/17/2013
Date Made Active in Reports: 02/15/2013
Number of Days to Update: 29

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 10/01/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Annually

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 09/05/2013
Date Data Arrived at EDR: 09/05/2013
Date Made Active in Reports: 10/10/2013
Number of Days to Update: 35

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 09/05/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 09/05/2013
Date Data Arrived at EDR: 09/05/2013
Date Made Active in Reports: 10/10/2013
Number of Days to Update: 35

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 09/05/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 08/19/2013
Date Data Arrived at EDR: 08/19/2013
Date Made Active in Reports: 10/08/2013
Number of Days to Update: 50

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 08/19/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Varies

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing
For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List
Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List
Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

LUST REG 1: Active Toxic Site Investigation
Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST: Geotracker's Leaking Underground Fuel Tank Report

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state. For more information on a particular leaking underground storage tank sites, please contact the appropriate regulatory agency.

Date of Government Version: 09/16/2013
Date Data Arrived at EDR: 09/17/2013
Date Made Active in Reports: 10/16/2013
Number of Days to Update: 29

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 10/17/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Quarterly

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

SLIC: Statewide SLIC Cases

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/16/2013
Date Data Arrived at EDR: 09/17/2013
Date Made Active in Reports: 10/17/2013
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 10/17/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Annually

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 02/05/2013
Date Data Arrived at EDR: 02/06/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 65

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 09/28/2012
Date Data Arrived at EDR: 11/01/2012
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 162

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 08/02/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 08/27/2012
Date Data Arrived at EDR: 08/28/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 49

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 09/12/2011
Date Data Arrived at EDR: 09/13/2011
Date Made Active in Reports: 11/11/2011
Number of Days to Update: 59

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 02/06/2013
Date Data Arrived at EDR: 02/08/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 63

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Semi-Annually

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 02/28/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 43

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 03/01/2013
Date Data Arrived at EDR: 03/01/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 42

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

State and tribal registered storage tank lists

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 09/16/2013
Date Data Arrived at EDR: 09/17/2013
Date Made Active in Reports: 10/16/2013
Number of Days to Update: 29

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 10/17/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities
A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 08/01/2009
Date Data Arrived at EDR: 09/10/2009
Date Made Active in Reports: 10/01/2009
Number of Days to Update: 21

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 10/07/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Quarterly

INDIAN UST R10: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 02/05/2013
Date Data Arrived at EDR: 02/06/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 65

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 02/21/2013
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 45

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

INDIAN UST R8: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 08/27/2012
Date Data Arrived at EDR: 08/28/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 49

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 02/28/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 43

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 05/10/2011
Date Data Arrived at EDR: 05/11/2011
Date Made Active in Reports: 06/14/2011
Number of Days to Update: 34

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 08/02/2012
Date Data Arrived at EDR: 08/03/2012
Date Made Active in Reports: 11/05/2012
Number of Days to Update: 94

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 02/06/2013
Date Data Arrived at EDR: 02/08/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 63

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Semi-Annually

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 09/28/2012
Date Data Arrived at EDR: 11/07/2012
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 156

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 08/02/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: Varies

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 10/17/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27
Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties
Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 09/05/2013
Date Data Arrived at EDR: 09/05/2013
Date Made Active in Reports: 10/10/2013
Number of Days to Update: 35
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 09/05/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Quarterly

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 09/28/2012
Date Data Arrived at EDR: 10/02/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 14
Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 10/01/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/24/2013
Date Data Arrived at EDR: 06/25/2013
Date Made Active in Reports: 08/09/2013
Number of Days to Update: 45
Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 09/24/2013
Next Scheduled EDR Contact: 01/08/2014
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39
Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137
Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: No Update Planned

WMUDS/SWAT: Waste Management Unit Database
Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30
Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 08/07/2013
Next Scheduled EDR Contact: 11/25/2013
Data Release Frequency: No Update Planned

SWRCY: Recycler Database
A listing of recycling facilities in California.

Date of Government Version: 09/16/2013
Date Data Arrived at EDR: 09/19/2013
Date Made Active in Reports: 10/17/2013
Number of Days to Update: 28
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 09/16/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 04/26/2013
Date Made Active in Reports: 05/16/2013
Number of Days to Update: 20
Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 10/01/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52
Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 07/31/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US CDL: Clandestine Drug Labs
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 08/06/2013
Date Data Arrived at EDR: 09/11/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 22

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 09/04/2013
Next Scheduled EDR Contact: 12/16/2013
Data Release Frequency: Quarterly

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 09/05/2013
Date Data Arrived at EDR: 09/05/2013
Date Made Active in Reports: 10/10/2013
Number of Days to Update: 35

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 09/05/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Quarterly

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 06/30/2013
Date Data Arrived at EDR: 09/03/2013
Date Made Active in Reports: 10/10/2013
Number of Days to Update: 37

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 09/03/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Varies

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/01/2007
Date Data Arrived at EDR: 11/19/2008
Date Made Active in Reports: 03/30/2009
Number of Days to Update: 131

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

Local Lists of Registered Storage Tanks

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/23/2009
Date Data Arrived at EDR: 09/23/2009
Date Made Active in Reports: 10/01/2009
Number of Days to Update: 8

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 09/03/2013
Next Scheduled EDR Contact: 12/16/2013
Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/06/2013
Date Data Arrived at EDR: 04/25/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 07/24/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: Varies

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 06/14/2013
Date Data Arrived at EDR: 06/17/2013
Date Made Active in Reports: 08/21/2013
Number of Days to Update: 65

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 09/23/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Varies

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 09/11/2013
Date Data Arrived at EDR: 09/11/2013
Date Made Active in Reports: 10/14/2013
Number of Days to Update: 33

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 09/11/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 55

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 10/01/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Annually

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 03/12/2013
Date Data Arrived at EDR: 05/01/2013
Date Made Active in Reports: 06/25/2013
Number of Days to Update: 55

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 10/30/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

LDS: Land Disposal Sites Listing

The Land Disposal program regulates of waste discharge to land for treatment, storage and disposal in waste management units.

Date of Government Version: 09/16/2013
Date Data Arrived at EDR: 09/17/2013
Date Made Active in Reports: 10/16/2013
Number of Days to Update: 29

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 10/17/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing

The State Water Resources Control Board and nine Regional Water Quality Control Boards partner with the Department of Defense (DoD) through the Defense and State Memorandum of Agreement (DSMOA) to oversee the investigation and remediation of water quality issues at military facilities.

Date of Government Version: 09/16/2013
Date Data Arrived at EDR: 09/17/2013
Date Made Active in Reports: 10/16/2013
Number of Days to Update: 29

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 10/17/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 07/11/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Varies

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 08/05/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 10/18/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Semi-Annually

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 03/13/2013
Number of Days to Update: 15

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 06/30/2013
Date Data Arrived at EDR: 08/07/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 57
Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 09/30/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Varies

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 12/18/2012
Date Data Arrived at EDR: 03/13/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 30
Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 09/13/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Annually

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146
Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/28/2013
Next Scheduled EDR Contact: 09/09/2013
Data Release Frequency: Varies

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 09/05/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 28
Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 09/05/2013
Next Scheduled EDR Contact: 12/16/2013
Data Release Frequency: Semi-Annually

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 07/31/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 44
Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 08/30/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Annually

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2006
Date Data Arrived at EDR: 09/29/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 64
Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 09/24/2013
Next Scheduled EDR Contact: 01/08/2014
Data Release Frequency: Every 4 Years

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

SSTS: Section 7 Tracking Systems
Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77
Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 07/20/2011
Date Data Arrived at EDR: 11/10/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 61

Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 10/09/2014
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 11/01/2012
Date Data Arrived at EDR: 01/16/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 114

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 10/18/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Annually

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 03/14/2013
Date Data Arrived at EDR: 03/20/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 112

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Quarterly

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 04/09/2013
Date Data Arrived at EDR: 04/11/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 29

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 10/09/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 03/08/2013
Date Data Arrived at EDR: 03/21/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 111

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 09/11/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Quarterly

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 05/08/2012
Date Data Arrived at EDR: 05/25/2012
Date Made Active in Reports: 07/10/2012
Number of Days to Update: 46

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 04/19/2013
Number of Days to Update: 52

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 08/26/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Biennially

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 08/19/2013
Date Data Arrived at EDR: 08/19/2013
Date Made Active in Reports: 10/08/2013
Number of Days to Update: 50

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 08/19/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Quarterly

UIC: UIC Listing

A listing of underground control injection wells.

Date of Government Version: 08/21/2013
Date Data Arrived at EDR: 09/17/2013
Date Made Active in Reports: 10/17/2013
Number of Days to Update: 30

Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 09/17/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Varies

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 07/05/2013
Date Data Arrived at EDR: 07/05/2013
Date Made Active in Reports: 08/26/2013
Number of Days to Update: 52
Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 10/01/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List
The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 10/21/1993
Date Data Arrived at EDR: 11/01/1993
Date Made Active in Reports: 11/19/1993
Number of Days to Update: 18
Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 09/23/2013
Next Scheduled EDR Contact: 01/08/2014
Data Release Frequency: No Update Planned

DRYCLEANERS: Cleaner Facilities
A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 09/11/2013
Date Made Active in Reports: 10/16/2013
Number of Days to Update: 35
Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/24/2012
Data Release Frequency: Annually

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13
Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 09/30/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Varies

ENF: Enforcement Action Listing
A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 08/09/2013
Date Data Arrived at EDR: 08/13/2013
Date Made Active in Reports: 10/08/2013
Number of Days to Update: 56
Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 07/16/2013
Date Made Active in Reports: 08/26/2013
Number of Days to Update: 41

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 10/15/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Annually

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2010
Date Data Arrived at EDR: 06/25/2013
Date Made Active in Reports: 08/22/2013
Number of Days to Update: 58

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 09/27/2013
Next Scheduled EDR Contact: 01/08/2014
Data Release Frequency: Varies

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 10/18/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Semi-Annually

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011
Date Data Arrived at EDR: 03/09/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 54

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 03/04/2013
Date Data Arrived at EDR: 03/15/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 56

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 09/27/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Quarterly

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 08/02/2013
Next Scheduled EDR Contact: 11/11/2013
Data Release Frequency: Varies

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 09/16/2013
Date Data Arrived at EDR: 09/19/2013
Date Made Active in Reports: 10/17/2013
Number of Days to Update: 28
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 09/16/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing
The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 08/29/2013
Date Data Arrived at EDR: 09/13/2013
Date Made Active in Reports: 10/14/2013
Number of Days to Update: 31
Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 09/11/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Varies

COAL ASH DOE: Sleam-Electric Plan Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 10/15/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 08/17/2010
Date Data Arrived at EDR: 01/03/2011
Date Made Active in Reports: 03/21/2011
Number of Days to Update: 77
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 09/13/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Varies

HWT: Registered Hazardous Waste Transporter Database
A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 07/15/2013
Date Data Arrived at EDR: 07/16/2013
Date Made Active in Reports: 08/12/2013
Number of Days to Update: 27
Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 10/15/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Quarterly

HWP: EnviroStor Permitted Facilities Listing
Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 08/28/2013
Date Data Arrived at EDR: 08/27/2013
Date Made Active in Reports: 10/10/2013
Number of Days to Update: 44
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/27/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Quarterly

Financial Assurance 2: Financial Assurance Information Listing
A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 08/12/2013
Date Data Arrived at EDR: 08/20/2013
Date Made Active in Reports: 10/08/2013
Number of Days to Update: 49
Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 08/15/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing
Financial Assurance information

Date of Government Version: 06/30/2013
Date Data Arrived at EDR: 08/08/2013
Date Made Active in Reports: 08/27/2013
Number of Days to Update: 19
Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 10/25/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites
A listing of former lead smelter site locations.

Date of Government Version: 01/29/2013
Date Data Arrived at EDR: 02/14/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 13
Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 09/24/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites
A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36
Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

2020 COR ACTION: 2020 Corrective Action Program List
The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 11/11/2011
Date Data Arrived at EDR: 05/18/2012
Date Made Active in Reports: 05/25/2012
Number of Days to Update: 7
Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 08/16/2013
Next Scheduled EDR Contact: 11/25/2013
Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands
Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339
Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 10/18/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: N/A

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 04/15/2013
Date Data Arrived at EDR: 07/03/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 72

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 10/04/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Quarterly

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Quarterly

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)
The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 01/23/2013
Date Data Arrived at EDR: 01/30/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-5962
Last EDR Contact: 09/30/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data
A listing of minor source facilities.

Date of Government Version: 01/23/2013
Date Data Arrived at EDR: 01/30/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-5962
Last EDR Contact: 09/30/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Annually

EPA WATCH LIST: EPA WATCH LIST
EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 06/30/2013
Date Data Arrived at EDR: 08/13/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 08/07/2013
Next Scheduled EDR Contact: 11/25/2013
Data Release Frequency: Quarterly

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR US Hist Auto Stat: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Proprietary Historic Dry Cleaners - Cole

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: N/A
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Auto Stat: EDR Proprietary Historic Gas Stations - Cole

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: N/A
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

COUNTY RECORDS

ALAMEDA COUNTY:

Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 07/25/2013
Date Data Arrived at EDR: 07/26/2013
Date Made Active in Reports: 08/09/2013
Number of Days to Update: 14

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 09/30/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Semi-Annually

Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 07/25/2013
Date Data Arrived at EDR: 07/26/2013
Date Made Active in Reports: 08/20/2013
Number of Days to Update: 25

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 09/30/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA Facility List

Cupa Facility List

Date of Government Version: 06/20/2013
Date Data Arrived at EDR: 06/21/2013
Date Made Active in Reports: 08/21/2013
Number of Days to Update: 61

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA Facility Listing

Cupa facility list.

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 08/02/2013
Date Made Active in Reports: 08/22/2013
Number of Days to Update: 20

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 10/09/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA Facility Listing

Cupa Facility Listing

Date of Government Version: 06/30/2013
Date Data Arrived at EDR: 07/24/2013
Date Made Active in Reports: 08/09/2013
Number of Days to Update: 16

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 09/30/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 06/20/2013
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 08/09/2013
Number of Days to Update: 39

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 10/04/2013
Next Scheduled EDR Contact: 11/25/2013
Data Release Frequency: Varies

CONTRA COSTA COUNTY:

Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 08/20/2013
Date Data Arrived at EDR: 08/23/2013
Date Made Active in Reports: 10/08/2013
Number of Days to Update: 46

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 08/05/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA Facility List
Cupa Facility list

Date of Government Version: 01/09/2013
Date Data Arrived at EDR: 01/10/2013
Date Made Active in Reports: 02/25/2013
Number of Days to Update: 46

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 09/20/2013
Next Scheduled EDR Contact: 08/19/2013
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 08/20/2013
Date Data Arrived at EDR: 08/23/2013
Date Made Active in Reports: 10/08/2013
Number of Days to Update: 46

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 08/05/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA Resources List
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 06/30/2013
Date Data Arrived at EDR: 07/16/2013
Date Made Active in Reports: 07/24/2013
Number of Days to Update: 8

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 10/09/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Semi-Annually

HUMBOLDT COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 08/09/2013
Date Data Arrived at EDR: 08/09/2013
Date Made Active in Reports: 08/22/2013
Number of Days to Update: 13

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 08/09/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Varies

IMPERIAL COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 07/26/2013
Date Data Arrived at EDR: 08/09/2013
Date Made Active in Reports: 08/22/2013
Number of Days to Update: 13

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

INYO COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 09/11/2013
Date Made Active in Reports: 10/14/2013
Number of Days to Update: 33

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Varies

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 08/31/2010
Date Data Arrived at EDR: 09/01/2010
Date Made Active in Reports: 09/30/2010
Number of Days to Update: 29

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 08/07/2013
Next Scheduled EDR Contact: 11/25/2013
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 08/22/2013
Date Data Arrived at EDR: 08/27/2013
Date Made Active in Reports: 10/08/2013
Number of Days to Update: 42

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Varies

LAKE COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA Facility List
Cupa facility list

Date of Government Version: 01/23/2013
Date Data Arrived at EDR: 01/25/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 33

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Varies

LOS ANGELES COUNTY:

San Gabriel Valley Areas of Concern
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: EPA Region 9
Telephone: 415-972-3178
Last EDR Contact: 09/23/2013
Next Scheduled EDR Contact: 01/08/2014
Data Release Frequency: No Update Planned

HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 03/28/2013
Date Data Arrived at EDR: 06/17/2013
Date Made Active in Reports: 08/21/2013
Number of Days to Update: 65

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 10/09/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Semi-Annually

List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 07/22/2013
Date Data Arrived at EDR: 07/22/2013
Date Made Active in Reports: 08/26/2013
Number of Days to Update: 35

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 10/22/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Varies

City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 03/05/2009
Date Data Arrived at EDR: 03/10/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 29

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 07/17/2013
Next Scheduled EDR Contact: 11/04/2013
Data Release Frequency: Varies

Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 01/30/2013
Date Data Arrived at EDR: 02/21/2013
Date Made Active in Reports: 03/25/2013
Number of Days to Update: 32

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Annually

City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 07/31/2013
Date Data Arrived at EDR: 08/01/2013
Date Made Active in Reports: 08/27/2013
Number of Days to Update: 26

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank

Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 03/28/2003
Date Data Arrived at EDR: 10/23/2003
Date Made Active in Reports: 11/26/2003
Number of Days to Update: 34

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Annually

City of Torrance Underground Storage Tank

Underground storage tank sites located in the city of Torrance.

Date of Government Version: 07/15/2013
Date Data Arrived at EDR: 07/18/2013
Date Made Active in Reports: 08/20/2013
Number of Days to Update: 33

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 10/09/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 09/20/2013
Date Data Arrived at EDR: 09/24/2013
Date Made Active in Reports: 10/18/2013
Number of Days to Update: 24

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Varies

MARIN COUNTY:

Underground Storage Tank Sites

Currently permitted USTs in Marin County.

Date of Government Version: 11/26/2012
Date Data Arrived at EDR: 11/28/2012
Date Made Active in Reports: 01/21/2013
Number of Days to Update: 54

Source: Public Works Department Waste Management
Telephone: 415-499-6647
Last EDR Contact: 10/07/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA Facility List

CUPA facility list.

Date of Government Version: 08/23/2013
Date Data Arrived at EDR: 08/27/2013
Date Made Active in Reports: 10/08/2013
Number of Days to Update: 42

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Varies

MONO COUNTY:

CUPA Facility List
CUPA Facility List

Date of Government Version: 09/04/2013
Date Data Arrived at EDR: 09/05/2013
Date Made Active in Reports: 10/14/2013
Number of Days to Update: 39

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 09/03/2013
Next Scheduled EDR Contact: 12/16/2013
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 09/11/2013
Date Data Arrived at EDR: 09/12/2013
Date Made Active in Reports: 10/14/2013
Number of Days to Update: 32

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Varies

NAPA COUNTY:

Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 12/05/2011
Date Data Arrived at EDR: 12/06/2011
Date Made Active in Reports: 02/07/2012
Number of Days to Update: 63

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 09/03/2013
Next Scheduled EDR Contact: 12/16/2013
Data Release Frequency: No Update Planned

Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 01/15/2008
Date Data Arrived at EDR: 01/16/2008
Date Made Active in Reports: 02/08/2008
Number of Days to Update: 23

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 09/03/2013
Next Scheduled EDR Contact: 12/16/2013
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 05/29/2013
Date Data Arrived at EDR: 05/30/2013
Date Made Active in Reports: 07/15/2013
Number of Days to Update: 46

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 08/15/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Varies

ORANGE COUNTY:

List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 08/13/2013
Date Made Active in Reports: 10/08/2013
Number of Days to Update: 56

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/07/2013
Next Scheduled EDR Contact: 11/25/2013
Data Release Frequency: Annually

List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 08/13/2013
Date Made Active in Reports: 10/08/2013
Number of Days to Update: 56

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/07/2013
Next Scheduled EDR Contact: 11/25/2013
Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 08/13/2013
Date Made Active in Reports: 10/08/2013
Number of Days to Update: 56

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/07/2013
Next Scheduled EDR Contact: 11/25/2013
Data Release Frequency: Quarterly

PLACER COUNTY:

Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 08/22/2013
Date Data Arrived at EDR: 08/22/2013
Date Made Active in Reports: 10/10/2013
Number of Days to Update: 49

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 08/20/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Semi-Annually

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 07/18/2013
Date Data Arrived at EDR: 07/18/2013
Date Made Active in Reports: 07/24/2013
Number of Days to Update: 6

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 09/23/2013
Next Scheduled EDR Contact: 01/08/2014
Data Release Frequency: Quarterly

Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 07/18/2013
Date Data Arrived at EDR: 07/18/2013
Date Made Active in Reports: 08/20/2013
Number of Days to Update: 33

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 09/23/2013
Next Scheduled EDR Contact: 01/08/2014
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

Toxic Site Clean-Up List

List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 05/03/2013
Date Data Arrived at EDR: 07/08/2013
Date Made Active in Reports: 07/24/2013
Number of Days to Update: 16

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 10/07/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Quarterly

Master Hazardous Materials Facility List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 05/03/2013
Date Data Arrived at EDR: 07/08/2013
Date Made Active in Reports: 08/23/2013
Number of Days to Update: 46

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 10/07/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Quarterly

SAN BERNARDINO COUNTY:

Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 09/03/2013
Date Data Arrived at EDR: 09/03/2013
Date Made Active in Reports: 10/10/2013
Number of Days to Update: 37

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 08/08/2013
Next Scheduled EDR Contact: 11/25/2013
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 09/23/2013
Date Data Arrived at EDR: 09/24/2013
Date Made Active in Reports: 10/17/2013
Number of Days to Update: 23

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 09/23/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Quarterly

Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2012
Date Data Arrived at EDR: 11/06/2012
Date Made Active in Reports: 11/30/2012
Number of Days to Update: 24

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

Environmental Case Listing
The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24
Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

Local Oversite Facilities
A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10
Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 08/07/2013
Next Scheduled EDR Contact: 11/25/2013
Data Release Frequency: Quarterly

Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/29/2010
Date Data Arrived at EDR: 03/10/2011
Date Made Active in Reports: 03/15/2011
Number of Days to Update: 5
Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 08/07/2013
Next Scheduled EDR Contact: 11/25/2013
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 09/25/2013
Date Data Arrived at EDR: 09/27/2013
Date Made Active in Reports: 10/18/2013
Number of Days to Update: 21
Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 09/23/2013
Next Scheduled EDR Contact: 01/08/2014
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 08/26/2013
Date Data Arrived at EDR: 08/27/2013
Date Made Active in Reports: 10/10/2013
Number of Days to Update: 44
Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Varies

SAN MATEO COUNTY:

Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 07/02/2013
Date Data Arrived at EDR: 07/05/2013
Date Made Active in Reports: 08/23/2013
Number of Days to Update: 49

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 06/13/2013
Next Scheduled EDR Contact: 09/30/2013
Data Release Frequency: Annually

Fuel Leak List

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 09/16/2013
Date Data Arrived at EDR: 09/17/2013
Date Made Active in Reports: 10/16/2013
Number of Days to Update: 29

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 09/16/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA Facility Listing

CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 09/23/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Varies

SANTA CLARA COUNTY:

Cupa Facility List

Cupa facility list

Date of Government Version: 09/03/2013
Date Data Arrived at EDR: 09/04/2013
Date Made Active in Reports: 10/10/2013
Number of Days to Update: 36

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 09/03/2013
Next Scheduled EDR Contact: 12/16/2013
Data Release Frequency: Varies

HIST LUST - Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LOP Listing

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 09/03/2013
Date Data Arrived at EDR: 09/06/2013
Date Made Active in Reports: 10/14/2013
Number of Days to Update: 38

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 09/03/2013
Next Scheduled EDR Contact: 12/16/2013
Data Release Frequency: Annually

Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 08/14/2013
Date Data Arrived at EDR: 08/16/2013
Date Made Active in Reports: 10/08/2013
Number of Days to Update: 53

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 08/08/2013
Next Scheduled EDR Contact: 11/25/2013
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA Facility List
CUPA facility listing.

Date of Government Version: 08/22/2013
Date Data Arrived at EDR: 08/27/2013
Date Made Active in Reports: 10/10/2013
Number of Days to Update: 44

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 09/09/2013
Date Data Arrived at EDR: 09/10/2013
Date Made Active in Reports: 10/14/2013
Number of Days to Update: 34

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 08/22/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Varies

SOLANO COUNTY:

Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 09/18/2013
Date Data Arrived at EDR: 09/20/2013
Date Made Active in Reports: 10/17/2013
Number of Days to Update: 27

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 09/16/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Quarterly

Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 09/18/2013
Date Data Arrived at EDR: 09/24/2013
Date Made Active in Reports: 10/18/2013
Number of Days to Update: 24

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 09/16/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Quarterly

SONOMA COUNTY:

Cupa Facility List
Cupa Facility list

Date of Government Version: 07/05/2013
Date Data Arrived at EDR: 07/05/2013
Date Made Active in Reports: 08/21/2013
Number of Days to Update: 47

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 09/30/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Varies

Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 07/02/2013
Date Data Arrived at EDR: 07/05/2013
Date Made Active in Reports: 08/12/2013
Number of Days to Update: 38

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 09/30/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Quarterly

SUTTER COUNTY:

Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 09/11/2013
Date Made Active in Reports: 10/14/2013
Number of Days to Update: 33

Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 09/10/2013
Next Scheduled EDR Contact: 12/23/2013
Data Release Frequency: Semi-Annually

TUOLUMNE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 01/14/2013
Date Data Arrived at EDR: 01/16/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 42

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

VENTURA COUNTY:

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 08/19/2013
Date Data Arrived at EDR: 08/27/2013
Date Made Active in Reports: 10/10/2013
Number of Days to Update: 44

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 08/19/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Quarterly

Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 10/07/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Annually

Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 08/19/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Quarterly

Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 05/28/2013
Date Data Arrived at EDR: 06/24/2013
Date Made Active in Reports: 08/12/2013
Number of Days to Update: 49
Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 08/29/2013
Date Data Arrived at EDR: 09/18/2013
Date Made Active in Reports: 10/16/2013
Number of Days to Update: 28
Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 09/16/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 06/24/2013
Date Data Arrived at EDR: 06/26/2013
Date Made Active in Reports: 08/20/2013
Number of Days to Update: 55
Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 09/23/2013
Next Scheduled EDR Contact: 01/08/2014
Data Release Frequency: Annually

YUBA COUNTY:

CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 08/05/2013
Date Made Active in Reports: 08/22/2013
Number of Days to Update: 17
Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 07/31/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013
Date Data Arrived at EDR: 08/19/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 45
Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 08/19/2013
Next Scheduled EDR Contact: 12/02/2013
Data Release Frequency: Annually

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 07/19/2012
Date Made Active in Reports: 08/28/2012
Number of Days to Update: 40

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 10/18/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 08/07/2013
Date Made Active in Reports: 09/10/2013
Number of Days to Update: 34

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 08/07/2013
Next Scheduled EDR Contact: 11/18/2013
Data Release Frequency: Annually

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 07/24/2013
Date Made Active in Reports: 08/19/2013
Number of Days to Update: 26

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 06/21/2013
Date Made Active in Reports: 08/05/2013
Number of Days to Update: 45

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 08/23/2013
Next Scheduled EDR Contact: 12/09/2013
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 08/09/2013
Date Made Active in Reports: 09/27/2013
Number of Days to Update: 49

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 09/16/2013
Next Scheduled EDR Contact: 12/30/2013
Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data
Source: Rextag Strategies Corp.
Telephone: (281) 769-2247
U.S. Electric Transmission and Power Plants Systems Digital GIS Data

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

GOLDEN WEST COLLEGE
15744 GOLDENWEST ST
HUNTINGTON BEACH, CA 92647

TARGET PROPERTY COORDINATES

Latitude (North):	33.7339 - 33° 44' 2.04''
Longitude (West):	118.0038 - 118° 0' 13.68''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	407009.3
UTM Y (Meters):	3732910.8
Elevation:	23 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	33118-F1 SEAL BEACH, CA
Most Recent Revision:	1981
East Map:	33117-F8 NEWPORT BEACH (DIGITAL), CA
Most Recent Revision:	0

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

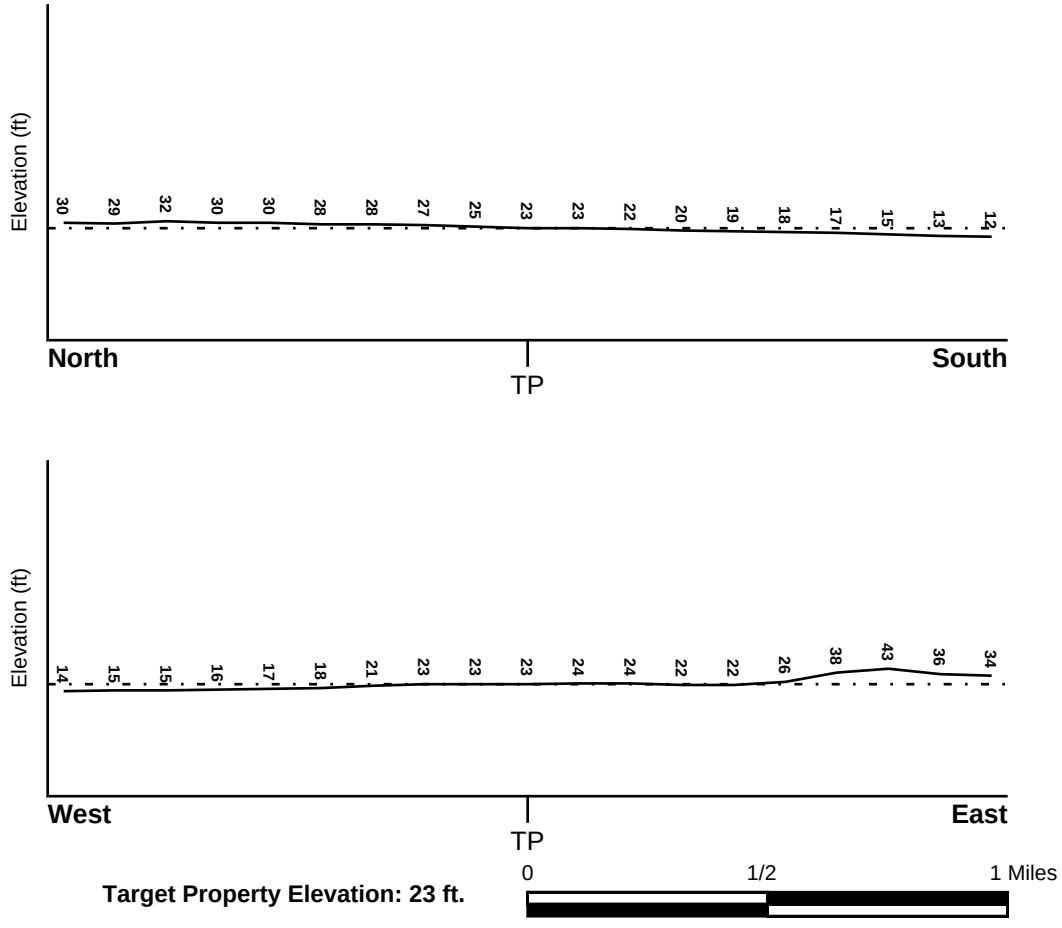
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General South

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Target Property Elevation: 23 ft.

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
ORANGE, CA	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 06059C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
SEAL BEACH	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Location Relative to TP:	1 - 2 Miles NNW
Site Name:	Ralph Gray Trucking Co
Site EPA ID Number:	CAD981995947
Surficial Aquifer Flow Dir.:	S TOWARD THE FLOOD CONTROL CHANNEL.
Measured Depth to Water:	7 feet in the semi-perched surficial aquifer.
Hydraulic Connection:	The semi-perched aquifer acts as an aquitard, but ground water will move slowly downward through this aquitard.
Sole Source Aquifer:	No information about a sole source aquifer is available
Data Quality:	Information based on site-specific subsurface investigations is documented in the CERCLIS investigation report(s)

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
1	1/8 - 1/4 Mile SW	SW

* ©1996 Site--specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
2	1/4 - 1/2 Mile NW	SW
3	1/4 - 1/2 Mile SSW	Not Reported
A4	1/4 - 1/2 Mile SE	SW
A6	1/4 - 1/2 Mile SE	SW
7	1/2 - 1 Mile SSE	Not Reported
8	1/2 - 1 Mile ESE	W
12	1/2 - 1 Mile WNW	W
13	1/2 - 1 Mile WSW	SW
E19	1/2 - 1 Mile ENE	NW
E20	1/2 - 1 Mile ENE	NW
F21	1/2 - 1 Mile ESE	SSW
F22	1/2 - 1 Mile ESE	SSW
F23	1/2 - 1 Mile ESE	SW
24	1/2 - 1 Mile ENE	SE
25	1/2 - 1 Mile ESE	SW
26	1/2 - 1 Mile NW	NW

For additional site information, refer to Physical Setting Source Map Findings.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

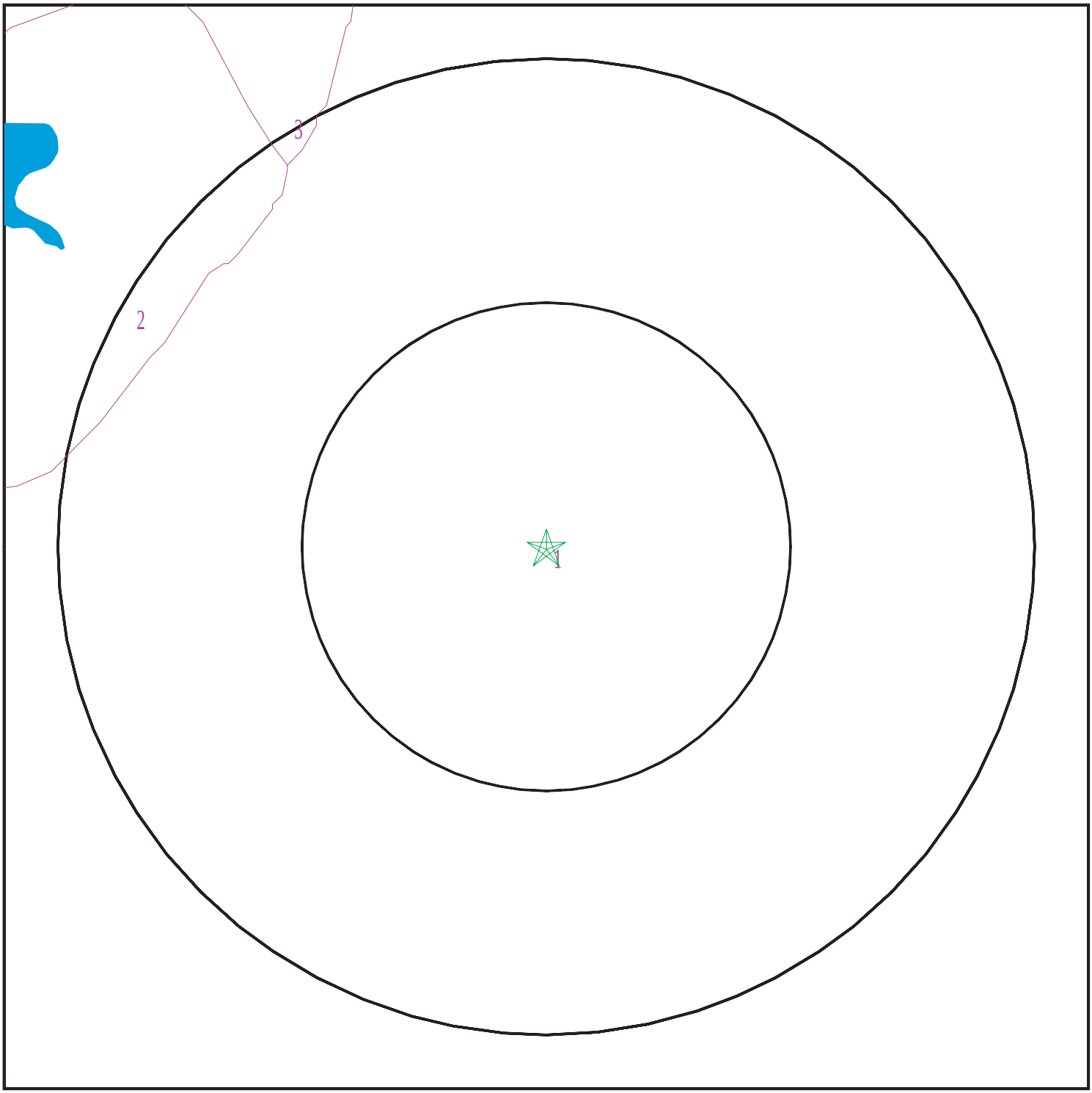
Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 3772583.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	Golden West College	CLIENT:	Dudek & Associates
ADDRESS:	15744 Goldenwest St Huntington Beach CA 92647	CONTACT:	Khristina Leyba
LAT/LONG:	33.7339 / 118.0038	INQUIRY #:	3772583.2s
		DATE:	October 30, 2013 7:39 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: BOLSA

Soil Surface Texture: silt loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class:
Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	silt loam	Not reported	Not reported	Max: 4 Min: 1.4	Max: 8.4 Min: 7.9
2	11 inches	68 inches	silty clay loam	Not reported	Not reported	Max: 4 Min: 1.4	Max: 8.4 Min: 7.9

Soil Map ID: 2

Soil Component Name: BOLSA

Soil Surface Texture: silty clay loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Somewhat poorly drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 137 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	silty clay loam	Not reported	Not reported	Max: 4 Min: 1.4	Max: 8.4 Min: 7.9
2	11 inches	68 inches	silt loam	Not reported	Not reported	Max: 4 Min: 1.4	Max: 8.4 Min: 7.9

Soil Map ID: 3

Soil Component Name: BOLSA

Soil Surface Texture: silty clay loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class:
Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	silty clay loam	Not reported	Not reported	Max: 4 Min: 1.4	Max: 8.4 Min: 7.9
2	11 inches	68 inches	silt loam	Not reported	Not reported	Max: 4 Min: 1.4	Max: 8.4 Min: 7.9

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
5	USGS40000137687	1/4 - 1/2 Mile NNE
C15	USGS40000137789	1/2 - 1 Mile NNE
C16	USGS40000137790	1/2 - 1 Mile NNE
D18	USGS40000137431	1/2 - 1 Mile SSE

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP

No PWS System Found

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
B9	CADW50000002972	1/2 - 1 Mile ENE
B10	CADW50000002970	1/2 - 1 Mile ENE
B11	CADW50000002971	1/2 - 1 Mile ENE
C14	CADW50000002997	1/2 - 1 Mile NNE
D17	CADW50000002892	1/2 - 1 Mile SSE

OTHER STATE DATABASE INFORMATION

STATE OIL/GAS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	CAOG9A000008096	1/4 - 1/2 Mile NNE
2	CAOG9A000008877	1/2 - 1 Mile NNE
A3	CAOG9A000008085	1/2 - 1 Mile ESE
A4	CAOG9A000008083	1/2 - 1 Mile ESE
5	CAOG9A000008014	1/2 - 1 Mile SSE

PHYSICAL SETTING SOURCE MAP - 3772583.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	Golden West College	CLIENT:	Dudek & Associates
ADDRESS:	15744 Goldenwest St Huntington Beach CA 92647	CONTACT:	Khristina Leyba
		INQUIRY #:	3772583.2s
LAT/LONG:	33.7339 / 118.0038	DATE:	October 30, 2013 7:39 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

			Database	EDR ID Number
1 **SW** **1/8 - 1/4 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	Not Reported SW 7.32 16.32 Not Reported 04/12/1995	**AQUIFLOW**	**37912**
2 **NW** **1/4 - 1/2 Mile** **Higher**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	083002966T SW 7.01 7.81 Not Reported 09/30/1997	**AQUIFLOW**	**69368**
3 **SSW** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	083000874T Not Reported 8.01 16.04 Not Reported 02/15/1999	**AQUIFLOW**	**66492**
A4 **SE** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	083001929T SW 3 ft 27 ft Not Reported 09/10/1991	**AQUIFLOW**	**69380**

5
NNE
1/4 - 1/2 Mile
Higher

FED USGS **USGS40000137687**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-334420118000001		
Monloc name:	005S011W14F002S		
Monloc type:	Well		
Monloc desc:	NAWQA DATA ENTRY COM + VER 9-25-2000 SNHAMLIN		
Huc code:	18070203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	33.7389083
Longitude:	-117.9999222	Sourcemap scale:	24000
Horiz Acc measure:	.5	Horiz Acc measure units:	seconds
Horiz Collection method:	Global positioning system (GPS), uncorrected		
Horiz coord refsys:	NAD83	Vert measure val:	26.0
Vert measure units:	feet	Vertacc measure val:	2.5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Quaternary Alluvium		

Aquifer type: Unconfined single aquifer
Construction date: 19991206 Welldepth: 28.5
Welldepth units: ft Wellholedepth: 28.5
Wellholedepth units: ft

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
2000-07-20	4.59		2000-07-20	4.59	

A6
SE
1/4 - 1/2 Mile
Lower

AQUIFLOW **55018**

Site ID: 083000814T
Groundwater Flow: SW
Shallow Water Depth: 6.8
Deep Water Depth: 8.6
Average Water Depth: Not Reported
Date: 05/08/1986

7
SSE
1/2 - 1 Mile
Lower

AQUIFLOW **52094**

Site ID: 083001760T
Groundwater Flow: Not Reported
Shallow Water Depth: 9
Deep Water Depth: 12
Average Water Depth: Not Reported
Date: 03/30/1993

8
ESE
1/2 - 1 Mile
Higher

AQUIFLOW **52057**

Site ID: 083000290T
Groundwater Flow: W
Shallow Water Depth: 7
Deep Water Depth: 10
Average Water Depth: Not Reported
Date: 01/22/1999

B9
ENE
1/2 - 1 Mile
Higher

CA WELLS **CADW50000002972**

Latitude : 33.737435
Longitude : 117.993264
Site code: 337374N1179933W003 Casgem sta: Not Reported
Local well: HBM-1/MP7 Casgem s 1: Observation
County id: 30
Basin cd: 8-1 Basin desc: Coastal Plain Of Orange County
Org unit n: Southern Region Office Site id: CADW50000002972

B10
ENE
1/2 - 1 Mile
Higher

CA WELLS **CADW50000002970**

Latitude :	33.737435		
Longitude :	117.993264		
Site code:	337374N1179933W001	Casgem sta:	05S11W14G002S
Local well:	HBM-1/MP1	Casgem s 1:	Observation
County id:	30		
Basin cd:	8-1	Basin desc:	Coastal Plain Of Orange County
Org unit n:	Southern Region Office	Site id:	CADW50000002970

B11
ENE
1/2 - 1 Mile
Higher

CA WELLS **CADW50000002971**

Latitude :	33.737435		
Longitude :	117.993264		
Site code:	337374N1179933W002	Casgem sta:	Not Reported
Local well:	HBM-1/MP11	Casgem s 1:	Observation
County id:	30		
Basin cd:	8-1	Basin desc:	Coastal Plain Of Orange County
Org unit n:	Southern Region Office	Site id:	CADW50000002971

12
WNW
1/2 - 1 Mile
Lower

Site ID:	083001074T
Groundwater Flow:	W
Shallow Water Depth:	4.85
Deep Water Depth:	5.82
Average Water Depth:	Not Reported
Date:	04/1999

AQUIFLOW **51969**

13
WSW
1/2 - 1 Mile
Lower

Site ID:	083001381T
Groundwater Flow:	SW
Shallow Water Depth:	10.02
Deep Water Depth:	14
Average Water Depth:	Not Reported
Date:	06/01/1999

AQUIFLOW **68270**

C14
NNE
1/2 - 1 Mile
Higher

CA WELLS **CADW50000002997**

Latitude :	33.7442		
Longitude :	117.9999		
Site code:	337442N1179999W002	Casgem sta:	05S11W14C004S
Local well:	Not Reported	Casgem s 1:	Unknown
County id:	30		
Basin cd:	8-1	Basin desc:	Coastal Plain Of Orange County
Org unit n:	Southern Region Office	Site id:	CADW50000002997

C15
NNE
1/2 - 1 Mile
Higher

FED USGS **USGS40000137789**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-334439117595301		
Monloc name:	005S011W14C002S		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18070201	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	33.7441833
Longitude:	-117.9989488	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	31.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 12

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1980-10-30	19.26		1980-10-30	19.26	
1980-08-25	20.22		1980-08-25	20.22	
1980-06-16	19.95		1980-06-16	19.95	
1980-02-07	20.07		1980-02-07	20.07	
1979-11-16	24.43		1979-11-16	24.43	
1979-09-26	51.52		1979-09-26	51.52	

C16
NNE
1/2 - 1 Mile
Higher

FED USGS **USGS40000137790**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-334439117595302		
Monloc name:	005S011W14C004S		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18070201	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	33.7441833
Longitude:	-117.9989488	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	31.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 52

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1986-08-19	15.55		1986-08-19	15.55	
1986-05-01	11.59		1986-05-01	11.59	
1986-02-26	10.18		1986-02-26	10.18	
1985-11-01	16.72		1985-11-01	16.72	
1985-08-17	14.98				
Note: The site had been pumped recently.					
1985-08-17	14.98				
Note: The site had been pumped recently.					
1985-05-14	10.30		1985-05-14	10.30	
1985-02-15	9.24		1985-02-15	9.24	
1984-10-31	14.28		1984-10-31	14.28	
1984-08-22	13.40		1984-08-22	13.40	
1984-05-11	8.61		1984-05-11	8.61	
1984-02-08	5.72		1984-02-08	5.72	
1983-11-02	10.99		1983-11-02	10.99	
1983-08-11	14.67		1983-08-11	14.67	
1983-05-12	10.98		1983-05-12	10.98	
1983-02-10	11.83		1983-02-10	11.83	
1982-11-04	17.30		1982-11-04	17.30	
1982-08-06	18.30		1982-08-06	18.30	
1982-05-07	13.85		1982-05-07	13.85	
1982-01-29	12.48		1982-01-29	12.48	
1981-11-06	18.35		1981-11-06	18.35	
1981-02-05	14.19		1981-02-05	14.19	
1980-10-30	19.26		1980-10-30	19.26	
1980-08-25	20.22		1980-08-25	20.22	
1980-06-16	19.95		1980-06-16	19.95	
1980-02-07	20.07		1980-02-07	20.07	
1979-11-16	24.43		1979-11-16	24.43	

D17
SSE **CA WELLS** **CADW50000002892**
1/2 - 1 Mile
Lower

Latitude :	33.7231		
Longitude :	117.9996		
Site code:	337231N1179996W001	Casgem sta:	05S11W23F001S
Local well:	Not Reported	Casgem s 1:	Unknown
County id:	30		
Basin cd:	8-1	Basin desc:	Coastal Plain Of Orange County
Org unit n:	Southern Region Office	Site id:	CADW50000002892

D18
SSE **FED USGS** **USGS40000137431**
1/2 - 1 Mile
Lower

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-334323117595201		
Monloc name:	005S011W23F001S		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18070201	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	33.7230728
Longitude:	-117.998671	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	20.00
Vert measure units:	feet	Vertacc measure val:	2
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19590202	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	272
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 70

Date	Feet below Surface	Feet to Sealevel
1986-08-19	36.75	
1986-05-01	27.02	
1986-02-26	28.02	
1985-11-04	37.55	
1985-08-17	37.54	
1985-05-14	26.96	
1985-04-15	23.94	
1985-03-12	20.08	
1985-02-28	20.72	
1984-10-31	35.23	
1984-10-09	34.81	
1984-09-06	36.79	
1984-08-07	35.84	
1984-07-03	33.75	
1984-06-04	31.08	
1984-05-07	24.68	
1984-02-08	19.30	
1983-11-02	28.06	
1983-08-11	33.35	
1983-05-16	25.47	
1983-02-10	24.50	
1982-11-04	31.23	
1982-08-06	32.19	
1982-05-07	24.25	
1982-01-29	24.01	
1981-11-06	29.69	
1981-08-06	30.03	
1981-05-12	23.78	
1981-02-05	22.74	
1980-10-30	28.64	
1980-08-25	31.21	

Date	Feet below Surface	Feet to Sealevel
1986-08-19	36.75	
1986-05-01	27.02	
1986-02-26	28.02	
1985-11-04	37.55	
1985-08-17	37.54	
1985-05-14	26.96	
1985-04-15	23.94	
1985-03-12	20.08	
1985-02-28	20.72	
1984-10-31	35.23	
1984-10-09	34.81	
1984-09-06	36.79	
1984-08-07	35.84	
1984-07-03	33.75	
1984-06-04	31.08	
1984-05-07	24.68	
1984-02-08	19.30	
1983-11-02	28.06	
1983-08-11	33.35	
1983-05-16	25.47	
1983-02-10	24.50	
1982-11-04	31.23	
1982-08-06	32.19	
1982-05-07	24.25	
1982-01-29	24.01	
1981-11-06	29.69	
1981-08-06	30.03	
1981-05-12	23.78	
1981-02-05	22.74	
1980-10-30	28.64	
1980-08-25	31.21	

Ground-water levels, continued.

Date	Feet below Surface	Feet to Sealevel
1980-06-16	28.06	
1980-02-07	27.77	
1979-11-16	31.11	
1959-02-02	52.00	

Date	Feet below Surface	Feet to Sealevel
1980-06-16	28.06	
1980-02-07	27.77	
1979-11-16	31.11	
1959-02-02	52.00	

E19
ENE
1/2 - 1 Mile
Higher

Site ID:	083000268T
Groundwater Flow:	NW
Shallow Water Depth:	Not Reported
Deep Water Depth:	Not Reported
Average Water Depth:	10.35
Date:	04/06/1999

AQUIFLOW **52026**

E20
ENE
1/2 - 1 Mile
Higher

Site ID:	083000688T
Groundwater Flow:	NW
Shallow Water Depth:	12
Deep Water Depth:	19
Average Water Depth:	Not Reported
Date:	07/31/1996

AQUIFLOW **65155**

F21
ESE
1/2 - 1 Mile
Higher

Site ID:	083000705T
Groundwater Flow:	SSW
Shallow Water Depth:	8
Deep Water Depth:	11
Average Water Depth:	Not Reported
Date:	05/25/1998

AQUIFLOW **54933**

F22
ESE
1/2 - 1 Mile
Higher

Site ID:	083000705T
Groundwater Flow:	SSW
Shallow Water Depth:	8
Deep Water Depth:	11
Average Water Depth:	Not Reported
Date:	05/25/1998

AQUIFLOW **54934**

F23
ESE
1/2 - 1 Mile
Higher

Site ID:	083000848T
Groundwater Flow:	SW
Shallow Water Depth:	10
Deep Water Depth:	15
Average Water Depth:	Not Reported
Date:	03/27/1989

AQUIFLOW **64544**

24
ENE
1/2 - 1 Mile
Higher

Site ID:	083000138T
Groundwater Flow:	SE
Shallow Water Depth:	Not Reported
Deep Water Depth:	Not Reported
Average Water Depth:	10
Date:	05/10/1996

AQUIFLOW **38909**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
25 **ESE** **1/2 - 1 Mile** **Higher**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	083001974T SW 3 27 Not Reported 07/23/1992	**AQUIFLOW**	**68210**
26 **NW** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	083000354T NW Not Reported Not Reported 11 09/30/1988	**AQUIFLOW**	**65112**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance

Database EDR ID Number

1
NNE **OIL_GAS** **CAOG9A000008096**
1/4 - 1/2 Mile

Districtnu:	1	Apinumber:	05901136
Blmwell:	N	Redrillcan:	Not Reported
Dryhole:	N	Wellstatus:	P
Operatorna:	Shell Western Exploration & Production Inc.		
Countyname:	Orange	Fieldname:	Any Field
Areaname:	Any Area		
Section:	14		
Township:	05S	Range:	11W
Basemeridi:	SB	Elevation:	Not Reported
Locationde:	Not Reported		
Glat:	33.73851		
Glong:	-118.000638		
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Lewis	Wellnumber:	1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	12/30/1899
Welldeptha:	Not Reported	Redrillfoo:	Not Reported
Abandonedd:	/ /	Completion:	/ /
Gissymbol:	PDH	Site id:	CAOG9A000008096

2
NNE **OIL_GAS** **CAOG9A000008877**
1/2 - 1 Mile

Districtnu:	1	Apinumber:	05901287
Blmwell:	N	Redrillcan:	Not Reported
Dryhole:	N	Wellstatus:	I
Operatorna:	Westminster Oil Co.		
Countyname:	Orange	Fieldname:	Any Field
Areaname:	Any Area		
Section:	14		
Township:	05S	Range:	11W
Basemeridi:	SB	Elevation:	Not Reported
Locationde:	Not Reported		
Glat:	33.744218		
Glong:	-118.000259		
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Not Reported	Wellnumber:	1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	12/30/1899
Welldeptha:	Not Reported	Redrillfoo:	Not Reported
Abandonedd:	/ /	Completion:	/ /
Gissymbol:	AOG	Site id:	CAOG9A000008877

A3
ESE **OIL_GAS** **CAOG9A000008085**
1/2 - 1 Mile

Districtnu:	1	Apinumber:	05901039
Blmwell:	N	Redrillcan:	Not Reported
Dryhole:	N	Wellstatus:	P
Operatorna:	W. G. Krieger		
Countyname:	Orange	Fieldname:	Any Field
Areaname:	Any Area		
Section:	14		
Township:	05S	Range:	11W
Basemeridi:	SB	Elevation:	Not Reported
Locationde:	Not Reported		
Glat:	33.731057		
Glong:	-117.990801		
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Miles	Wellnumber:	1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	12/30/1899
Welldeptha:	Not Reported	Redrillfoo:	Not Reported
Abandonedd:	/ /	Completion:	/ /
Gissymbol:	PDH	Site id:	CAOG9A000008085

A4
ESE **OIL_GAS** **CAOG9A000008083**
1/2 - 1 Mile

Districtnu:	1	Apinumber:	05901000
Blmwell:	N	Redrillcan:	Not Reported
Dryhole:	N	Wellstatus:	P
Operatorna:	Hillman-Long, Inc.		
Countyname:	Orange	Fieldname:	Any Field
Areaname:	Any Area		
Section:	14		
Township:	05S	Range:	11W
Basemeridi:	SB	Elevation:	Not Reported
Locationde:	Not Reported		
Glat:	33.73074		
Glong:	-117.989843		
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Westminster	Wellnumber:	1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	12/30/1899
Welldeptha:	Not Reported	Redrillfoo:	Not Reported
Abandonedd:	/ /	Completion:	/ /
Gissymbol:	PDH	Site id:	CAOG9A000008083

5
SSE **OIL_GAS** **CAOG9A000008014**
1/2 - 1 Mile

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Districtnu:	1	Apinumber:	05901127
Blmwell:	N	Redrillcan:	Not Reported
Dryhole:	N	Wellstatus:	P
Operatorna:	CalResources LLC		
Countyname:	Orange	Fieldname:	Any Field
Areaname:	Any Area		
Section:	23		
Township:	05S	Range:	11W
Basemeridi:	SB	Elevation:	Not Reported
Locationde:	Not Reported		
Glat:	33.72194		
Glong:	-117.996643		
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Anaheim-Sugar	Wellnumber:	55-23
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	12/30/1899
Welldeptha:	Not Reported	Redrillfoo:	Not Reported
Abandonedd:	/ /	Completion:	/ /
Gissymbol:	PDH	Site id:	CAOG9A000008014

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
92647	97	1

Federal EPA Radon Zone for ORANGE County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 92647

Number of sites tested: 1

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.300 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Health Services
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations
Source: Department of Conservation
Telephone: 916-323-1779
Oil and Gas well locations in the state.

RADON

State Database: CA Radon
Source: Department of Health Services
Telephone: 916-324-2208
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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ATTACHMENT B

County of Orange Environmental Health Records

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RE: EHD REQ #: 21502
15744 GOLDENWEST STREET HUNTINGTON BEACH CA 92647

Attached, please find the information that you have requested.

The information was prepared in the ordinary course of the business concerned at or near the time of the act, condition, or event, which they depict.

Information in this material has been redacted pursuant to the Public Record Act, Government Code 6245(c), 6254(k), 6255, Evidence Code 1040 and the California Constitution Article 1, Section 1.

If you have any question, please call this office at (714) 433-6022.

Environmental Health Records Unit

Attachment(s):
373 Pages

Orange County TAX ID: 95-6000-928W

EHD REDACTED RECORDS PROVIDED

ADDITIONAL GROUNDWATER INVESTIGATION/MONITORING AND REMEDIAL SYSTEM INSTALLATION GOLDEN WEST COLLEGE MAINTENANCE YARD 15744 GOLDEN WEST STREET HUNTINGTON BEACH, CALIFORNIA

Prepared for:

COAST COMMUNITY COLLEGE DISTRICT
1370 Adams Avenue
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Project No.: 006-02

September 29, 1991

TABLE OF CONTENTS

SECTION	TITLE	PAGE
1.0	INTRODUCTION	1
	1.1 BACKGROUND	1
	1.1.1 Subsurface Soil and Groundwater Investigation (AGI)	
	1.1.2 Subsurface Soil and Groundwater Investigation (FREY)	
2.0	OBJECTIVE	4
3.0	SCOPE OF WORK	4
4.0	SITE SETTING	5
	4.1 REGIONAL GEOLOGY AND HYDROGEOLOGY	5
	4.1.1 Groundwater Quality	
5.0	SITE SURVEY/SURFACE CONDITIONS	6
6.0	CURRENT SITE ACTIVITIES	6
	6.1 INSTALLATION OF A GROUNDWATER/PRODUCT RECOVERY TRENCH	6
	6.2 GROUNDWATER/PRODUCT RECOVERY TREATMENT EQUIPMENT SYSTEM	8
	6.3 AQUIFER CHARACTERISTICS ASSESSMENT	8
	6.4 GROUNDWATER MONITORING WELL SAMPLING AND GRADIENT ASSESSMENT	9
7.0	RESULTS OF CURRENT INVESTIGATION ACTIVITIES	10
	7.1 GROUNDWATER	10
	7.1.1 Laboratory Analytical Data	
	7.2 AQUIFER TEST RESULTS	10
	7.2.1 Transmissivity/Hydraulic Conductivity/Storativity	
	7.2.2 Radius of Influence	
8.0	CONCLUSIONS	12
	8.1 INSTALLATION OF A GROUNDWATER/PRODUCT RECOVERY TRENCH AND GROUNDWATER/PRODUCT RECOVERY TREATMENT EQUIPMENT SYSTEM	12
	8.2 GROUNDWATER	13
	8.3 AQUIFER TEST	14

TABLE OF CONTENTS (Cont'd)

REFERENCES
APPENDICES
TABLES
FIGURES

LIST OF APPENDICES

APPENDIX A - FIELD PROCEDURES
APPENDIX B - LABORATORY REPORTS
APPENDIX C - AQUIFER TEST PROCEDURES

LIST OF TABLES

1 LABORATORY RESULTS OF GROUNDWATER SAMPLES

2 GROUNDWATER ELEVATION/PRODUCT THICKNESS DATA

LIST OF FIGURES

1 SITE VICINITY MAP

2 SITE SKETCH SHOWING GROUNDWATER MONITORING/RECOVERY, VAPOR EXTRACTION AND GROUNDWATER RECOVERY TRENCH LOCATIONS

3 SCHEMATIC OF GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

4 SITE SKETCH WITH GROUNDWATER ELEVATIONS AND GRADIENT

5 SITE SKETCH WITH BENZENE CONCENTRATIONS IN GROUNDWATER

1.0 INTRODUCTION

This report presents the results of: 1) groundwater investigation and monitoring; 2) aquifer characteristics assessment and; 3) activities related to the installation of a groundwater/product recovery system at the site of the Golden West College Maintenance Yard. The site is located at 15744 Golden West Street in Huntington Beach, California (Figure 1).

The scope of work is based on information collected during previous investigations by others and: 1) an investigation conducted by FREY Environmental, as presented in a report submitted to Coast Community College District, dated July 19, 1990; 2) an interim free product recovery system workplan, dated April 8, 1990 (FREY, 1990); 3) subsequent discussions with Coast Community College District personnel, OCHCA personnel, and RWQCB personnel; and 4) a revised proposal for a Trench Product Recovery and Dewatering System, submitted to the Coast Community College District, and dated February 6, 1991.

1.1 BACKGROUND

Subsurface petroleum hydrocarbon contamination was found to be associated with two underground storage tanks (UST's) which had been removed from the maintenance yard area. One 1,000 gallon capacity fuel UST was removed on March 9, 1988. A second 1,000 gallon capacity UST was excavated and removed from the site on June 3, 1988. Evidence of soil an groundwater impacted with petroleum hydrocarbons was observed at the base of each UST excavation. The leak at the easternmost UST resulted in a free product plume above the water table.

As a result of the findings during UST removal, subsurface soil and groundwater investigations were conducted at the site. Previous investigations at the site included investigations by Applied Geosciences Inc. in 1988 and 1989, and by FREY Environmental in 1990.

1.1.1 Subsurface Soil and Groundwater Investigations (Applied Geosciences, Inc.)

The investigations by Applied Geosciences Inc. (AGI, 1988, 1989) had shown that:

> Shallow groundwater is present beneath the site at approximately 9.5 feet below the ground surface and has a flow direction towards the southwest;

Free-floating gasoline product at the shallow water table is present beneath the site in the area of groundwater monitoring wells MW-1 and MW-3. The source of the product is reported to be the former UST located to the northeast of the free product plume;

The lateral limits of petroleum hydrocarbons dissolved in the groundwater have been established except to the north and south of the former tanks;

Significant vadose zone soil contamination has not been observed at the site but may be present in localized areas adjacent to the former tanks;

The extent of migration of free product on the water table has not been defined in a southwest direction directly down-gradient of the easternmost former UST.

1.1.2 Subsurface Soil and Groundwater Investigation (FREY Environmental, Inc.)

The investigation by FREY, as reported July 19, 1990 (FREY, 1990) included: the drilling of seven borings and the installation of three potential vapor extraction wells and four groundwater monitoring wells in those borings; the collection and analyses of soil and groundwater samples; and the assessment of subsurface site conditions.

The investigation had shown that:

Soil

- Elevated concentrations of petroleum hydrocarbons and BTEX were observed and detected in soil samples collected and analyzed from near the groundwater surface at a depth of 10 feet in borings located in the central driveway area between the two maintenance buildings at the site. These borings include VES1, VES2, VES3, MW7 and MW8.

- Petroleum hydrocarbons were not observed or detected in the soil samples collected from depths of five feet nor in soil samples collected near the water table in wells MW9 and MW10. BTEX were detected in most samples collected and at notably higher concentrations in the samples collected at 10 feet except in wells MW9 and MW10 where BTEX were not detected (9 parts per billion of xylenes were detected in a sample from MW9 near the water table, however).

- Site soils generally consist of low permeability clays and silts, except for a silty sand and sand unit at depths of about 9.5 to 11 feet below the ground surface. Groundwater was observed to occur in this unit.

- The lateral extent of soil impacted with petroleum hydrocarbons has been assessed. Vadose zone soils above the water table have not been significantly impacted with petroleum hydrocarbons. Soils at the water table in areas where free product and dissolved phase hydrocarbons are present have been impacted.

Groundwater

- Free gasoline product was measured in wells MW1, MW3, and MW8 at thicknesses in excess of 3 feet.

- Dissolved phase concentrations of petroleum hydrocarbons and BTEX are present in groundwater samples collected from groundwater monitoring well MW7. Benzene was detected at a concentration of 0.003 mg/l in down-gradient groundwater monitoring well MW4.

- Petroleum hydrocarbons and BTEX were not detected in up-gradient wells MW2, MW5, MW6, and MW9, and in down-gradient well MW10.

- Groundwater at the site occurs at approximately 10 feet below the ground surface. Groundwater occurs in a silty sand and fine sand unit at about 9.5 to 11 feet below the ground surface.

- The groundwater beneath the site is estimated to flow in a southwest direction, based on water elevations from the on-site wells. The groundwater gradient is approximately 0.006 feet/foot.

- Groundwater levels have risen in the area approximately 0.9 feet over the last two years of groundwater monitoring.

- The lateral extent of groundwater impacted with petroleum hydrocarbons has been adequately assessed for design of an interim groundwater/product recovery and treatment system.

Therefore, based on the results of the previous investigations and requests from Mr. Peter Peuron of the OCHCA, and the Coast Community College District, an interim free product recovery system was proposed in a workplan dated April 8, 1990 (FREY, 1990). In the workplan it was proposed to begin interim product recovery utilizing a dual system product recovery and groundwater pump and

treatment system for groundwater with free product at the site. Two existing groundwater monitoring wells, MW1 and MW3, were proposed to be utilized.

However, upon subsequent discussions with Coast Community College District personnel it was decided to revise the interim workplan. An alternative, more aggressive plan, as presented in a revised proposal to the Coast Community College District dated February 6, 1991, was to: 1) install a groundwater/product recovery trench along the north side of the southern building and install two sumps in the trench; 2) conduct an aquifer test at the site, and; 3) install product recovery and treatment equipment at the site.

The general plans of the proposed system were discussed with personnel of the OCHCA and the RWQCB- Santa Ana Region. This report summarizes the activities and results of the work associated with the revised proposal dated February 6, 1991.

2.0 OBJECTIVES

The objectives of this work were to: 1) install and initiate operation of a groundwater/product recovery system at the site; 2) to conduct an aquifer test at the site; and 3) to collect and analyze groundwater samples from groundwater wells at the site, and assess the current groundwater flow direction and gradient.

3.0 SCOPE OF WORK

The scope of work included: 1) installation of a groundwater/ product recovery trench along the north side of the southern building and installation of two sumps in the trench; 2) conduct of an aquifer test at the site, 3) collection of samples from groundwater wells at the site, and the assessment of the groundwater flow direction and gradient; and 4) the installation and start-up of a product recovery and groundwater treatment system at the site. A more detailed description of the site activities and laboratory testing program is provided in Section 6.0.

The activities associated with system start-up, operation, monitoring, and groundwater/free product recovery are presented in a separate letter report addressed to Ms. Patricia Hannon of the RWQCB - Santa Ana Region and entitled Monitoring and Reporting Program, NPDES Permit No. 90-93 for July/August 1991. The report is dated September 28, 1991.

4.0 SITE SETTING

4.1 REGIONAL GEOLOGY AND HYDROGEOLOGY

The site is located in the Orange County Coastal Plain, which is the southern extension of the larger Los Angeles Coastal Plain. In the Orange County area, the Coastal Plain is bordered on the east by foothills of the Santa Ana Mountains, on the south by the San Joaquin Hills and on the west by the Pacific Ocean.

Along the coastline in Orange County, beginning at Newport Mesa and extending into Los Angeles County, as far as Baldwin Hills, is a line of low hills and intervening valleys. These hills delineate a zone of structural uplift and faulting known as the Newport-Inglewood structural zone.

Inland from the Newport-Inglewood zone, structurally downfolded Upper Pleistocene and older formations and their strata form a broad synclinal trough that underlies the coastal plain. The trough includes successive permeable and impermeable strata, that reach a depth of up to 20,000 feet near Anaheim. Deeper strata generally contain brines, however less shallow strata contain fresh water.

Just inland, northeast of the structural zone, fresh groundwater permeable formations are present at depths of 1,000 feet (OCWD, 1982).

These upper Pleistocene and older formations are overlain in the area by Recent sediments, which consist of sand and gravels at depths, and silt and clay near the surface. The lower, permeable sands and gravels, are termed the Talbert Aquifer. The Talbert Aquifer extends from Santa Ana Gap and Bolsa Gap northeastward to the Santa Ana Canyon (Poland, 1959). The Talbert Aquifer is about 75 feet thick in the southwestern area and steadily decreases in thickness towards the east. The top of the Talbert Aquifer water bearing zone ranges from about 50 to 90 feet below the ground surface, inland of the structural zone (Poland, 1959). The Talbert Aquifer is in hydraulic continuity with underlying permeable upper Pleistocene strata (OCWD, 1982). In the site area, groundwater in the Talbert Aquifer generally flows to the south-southwest (Poland, 1959).

Groundwater immediately beneath the site at a depth of about 10 feet occurs as perched groundwater in the primarily silts and clays of the Talbert Aquifer. The groundwater beneath the site is likely replenished by percolation from rainfall, and from percolation in shallow streams and channels.

4.1.1 Groundwater Quality

Groundwater use in the deeper Pleistocene water bearing formations is extensive. Many groundwater wells exist in the Orange County Coastal Plain area which obtain their water from the Pleistocene Formations. In the past, many wells obtained their water from the Talbert Aquifer, however water levels steadily declined with increased usage, and currently little water is obtained from the Talbert Aquifer.

Water quality is regulated by the RWQCB for the area in which the site is located. The RWQCB is charged with assigning beneficial uses for waters within their region, and verifying that the quality necessary for continued beneficial use of that water is maintained. For groundwater beneath the site, the assigned beneficial uses are municipal, agricultural, industrial process supply, and industrial service supply (RWQCB, 1984).

5.0 SITE SURVEY/SURFACE CONDITIONS

The site is located in the Golden West College Maintenance Yard area, which is immediately east of the southeast corner of the intersection of Golden West Street and McFadden Avenue. The site is bounded by tennis courts and Golden West College Campus to the south, a baseball field of Golden West College to the east, parking and nursery areas of Golden West College to the west, and McFadden Avenue to the north. Residential homes are located north of McFadden Avenue in the area.

The site topography is flat with a regional gentle slope to the southwest. The site elevation is about 25 feet MSL (Norris Repke, 1990).

6.0 CURRENT SITE ACTIVITIES

6.1 INSTALLATION OF A GROUNDWATER/PRODUCT RECOVERY TRENCH

Installation of a groundwater/product recovery trench was initiated on March 22, 1991. On March 23, 1991 and 24, 1991 a 70 foot long by approximately 3 foot wide, by 15 to 20 feet deep trench was excavated at the site from the location of Wells RW2 to RW1 (See Figure 2). Wells (Sumps) RW1 and RW2 were installed in the open trench excavated to a depth of approximately 19 to 20 feet below the ground surface on March 23, and 24, 1991. This section of trench was excavated without shoring and using a backhoe (Ford 755 with an extend-hoe).

On May 4 and 5, 1991 a 50 foot long by approximately 3 feet wide by 15 to 19 foot deep trench was excavated from the location of

well RW1 to observation well OW1 (Figure 2). This section of trench was excavated using a track excavator and a pull-along shoring box.

Approximately 50 feet of continuous connected four-inch diameter drainage pipe (french drain) with approximately 1/2-inch diameter weep holes wrapped in filter fabric was set at the base of the trench in the section from well RW1 to the eastern extension of the trench, near OW1. Pipe was not set in the 70 foot section of trench extending from well RW1 to RW2 due to the frequent caving of unshored trench sidewalls, during trench excavation. The base of the entire 120 foot long trench and the drainage pipe was backfilled with 3/4 inch pea gravel and 4 X 16 mesh clean washed sand to depths of approximately 8 feet below the ground surface.

Well RW1 is constructed of a 10-inch diameter schedule 40 PVC casing and, eight row, 0.050 inch slot, 4 slots per inch, screen. The well is screened from approximately 7.3 to 19.3 feet below the ground surface. Blank casing extends from 7.3 to 1.3 feet below the ground surface. Well RW1 was constructed on March 24, 1991.

Well RW2 is constructed of 8-inch diameter schedule 40 PVC casing and, eight row, 0.065 inch slot, 4-slots per inch screen. The well is screened from approximately 8.3 feet to 18.3 feet below the ground surface. Blank casing extends from about 8.3 feet to 0.5 feet below grade. Well RW2 was constructed on March 24, 1991.

Observation well OW1 is constructed of two-inch diameter schedule 40 PVC casing and 4-slots per inch 0.020 inch-slot well screen. The well screen extends from approximately 8 to 18 feet below grade. The well is designed for use in observing the drawdown on the eastern boundary of the trench as a result of groundwater withdrawal activities from wells RW1 and RW2. Well OW1 was constructed on May 5, 1991.

All the wells were installed within an open trench. 4 X 16 mesh sand was used as a gravel pack around the well screens of the three wells. The two recovery wells were developed by pumping. Well development water was treated using carbon and discharged to the storm drain in accordance with conditions set forth in NPDES Permit No. 8000184 and discussions with personnel of the RWQCB - Santa Ana Region.

Soil removed from the trench during excavation was used to backfill the trench from immediately above the gravel pack to approximately 1 foot below the ground surface. Base course (approximately 5 to 6 inches thick), and asphalt (approximately 4 inches thick) were placed in the upper foot.

6.2 GROUNDWATER/PRODUCT RECOVERY AND TREATMENT EQUIPMENT SYSTEM

Based on the results of the aquifer characteristics assessment (Section 6.3) groundwater withdrawal and treatment system specifications were finalized for use at the site. One single 120 volt, 1/3 hp, 5 gpm electrical submersible pump was installed in each of wells RW1 and RW2 in July 1991. The pumps are activated/ controlled by high-low water level sensors. The pumps withdrawal petroleum hydrocarbon impacted groundwater and pump the water through an above ground 30 gpm rated, gravity, oil-water separator. Water passing through the oil-water separator accumulates in an above ground 500 gallon capacity holding tank. Groundwater accumulating in the holding tank is periodically pumped through 2 ASC-1200 carbon tanks, via a booster pump, to the storm drain.

The water holding tank is equipped with a high liquid level float switch designed to shut down the submersible pumps if the water level in the holding tank should reach that level (Figure 3).

The system which was installed included provisions for the installation of pneumatic pumps in the groundwater recovery wells with only minor system modification in order to skim free product from wells, if it should readily accumulate during groundwater withdrawal.

The activities associated with system start-up, operation, monitoring, and groundwater/free product recovery are presented in a separate letter report addressed to Ms. Patricia Hannon of the RWQCB - Santa Ana Region and entitled Monitoring and Reporting Program, NPDES Permit No. 90-93 for July/August 1991. The report is dated September 28, 1991.

6.3 AQUIFER CHARACTERISTICS ASSESSMENT

To assess the hydraulic characteristics of the water bearing formation closest to the surface, a constant rate aquifer test was performed at the site. A constant rate pump test with recovery monitoring was conducted at the site on April 8 and 9, 1991. Well RW1 was used for groundwater withdrawal. Wells RW2, and MW1 through MW10 were used for monitoring groundwater level changes during the withdrawal of groundwater from well RW1. Groundwater was withdrawn from RW1 for a period of approximately 14.6 hours on April 8 and 9, 1991. Recovery of groundwater in the discharge well and the groundwater wells monitored during pumping, was monitored immediately following discontinuance of pumping for a period of about 13 hours on April 9, 1991.

Drawdown and recovery of the pumping well, and the other on-site groundwater wells, screened in the groundwater bearing materials present at depths of approximately 10 feet below the ground surface, were monitored during conduct of the test. Constant rate pump test procedures, and data sheets are presented in Appendix C.

Groundwater produced during the aquifer test was discharged to the storm drain by passing the water through activated carbon. The treatment of petroleum hydrocarbon impacted groundwater and the discharge of the groundwater was conducted in accordance with conditions set forth in NPDES Permit No. 8000184 and discussions with personnel of the RWQCB - Santa Ana Region. A groundwater sample from the treated groundwater was collected and analyzed for petroleum hydrocarbons and benzene, toluene, ethylbenzene, and xylenes (BTEX) in general accordance with EPA Method Nos. 8015M and 602, respectively. Petroleum hydrocarbons were detected at a concentration of 0.083 mg/l in the sample analyzed. Benzene and ethylbenzene were not detected. Toluene was detected at a concentration 0.0013 mg/l and xylenes were detected at a concentration of 0.0075 mg/l. These concentrations were below the discharge limits set in the NPDES Permit discharge specifications. Chemical analytical laboratory reports appear in Appendix B.

6.4 GROUNDWATER MONITORING WELL SAMPLING AND GRADIENT ASSESSMENT

On July 24, 1991, groundwater monitoring wells MW1 through MW10 were measured for depth to water. The groundwater wells at the site were also measured for liquid hydrocarbons (free product) at the surface. Wells MW1, MW3 and MW8 had measurable quantities of free product on the water surface. Wells MW4 through MW7 and MW10, were purged and sampled on July 24, 1991. Wells with measurable quantities of free product (Wells MW1, MW3 and MW8) and wells MW2, and MW9 were not sampled.

Groundwater samples collected from wells were analyzed for petroleum hydrocarbons and BTEX in general accordance with EPA Method Nos. 8015M and 602, respectively. A site sketch showing monitoring well locations along with groundwater elevations and estimated groundwater gradient directions appears as Figure 4. A site sketch showing monitoring well locations along with benzene concentrations in groundwater on July 24, 1991 appears as Figure 5. Groundwater laboratory results, and groundwater elevation/ product thickness data are presented in Tables 1 and 2, respectively. Groundwater sampling procedures and sampling data are presented in Appendix A and Table A-1, respectively. Laboratory reports are presented in Appendix B.

7.0 RESULTS OF CURRENT INVESTIGATION ACTIVITIES

7.1 GROUNDWATER

Depth to groundwater was measured in each groundwater monitoring well, at depths ranging from approximately 10.5 to 12.0 feet BGS, on July 24, 1991 (Table 2). Calculated water level elevations at the site, on July 24, 1991, ranged from 12.93 feet to 14.48 feet above mean sea level (MSL). The shallow perched ground water beneath the site flows toward the southwest, with an estimated gradient of 0.007 ft/ft. The groundwater flow direction and gradient at the site on July 24, 1991, is shown on Figure 4.

Groundwater monitoring wells MW1, MW3, and MW8, groundwater recovery well RW1, and groundwater observation well OW1 (piezometer) had measurable quantities of free product on the water surface in August 1991 (Table 2).

7.1.1 Laboratory Analytical Data

Petroleum hydrocarbons and BTEX were not detected in groundwater samples collected from wells MW5, MW6, and MW10, except for toluene detected in groundwater collected from well MW6 at a concentration of 0.002 milligrams/liter (mg/l) (Figure 5).

Petroleum hydrocarbons were detected in groundwater samples collected from wells MW4 and MW7, at concentrations of 0.87 and 2.9 mg/l respectively. BTEX were detected in groundwater samples collected from these two wells. Benzene was detected at concentrations of 0.206 mg/l and 0.414 mg/l in wells MW4 and MW7, respectively (Figure 5).

Free product was detected in wells MW1, MW3 and MW8, RW1 and OW1. Free product was not detected in other wells installed at the site.

7.2 AQUIFER TEST RESULTS

Groundwater recovery well/sump RW1 was pumped at a rate of about 1 gallon per minute (gpm) for 14.6 hours. Pumping at 1 gpm resulted in a water level decline of about 3.0 feet in well RW1 after 877 minutes (14.6 hours).

Groundwater levels in well RW2 (screened within the trench backfill) declined as much as 1.12 feet as a result of groundwater withdrawal from well RW1. A groundwater level decline was measured in all the wells monitored, in response to groundwater withdrawal from well RW1. The largest groundwater level decline was observed in well MW8, located approximately 12 feet south of the groundwater recovery well. Well MW8, which had product, at a thickness of about 2.85 feet at the time of the aquifer test, was

observed to have a groundwater level decline of up to 1.2 feet. This decline was observed about 900 minutes after the aquifer test began.

The largest groundwater level decline in a well, without free product, and outside of the trench, was observed in well MW7 located approximately 45 feet from well RW1. A decline of about 0.2 feet was measured in well MW7 after 1380 minutes (23 hours), 530 minutes after pumping ceased in well RW1. Well MW6, located approximately 110 feet northeast of well RW1 was least affected by pumping. A decline of 0.02 feet was observed in well MW6.

Based on observations in the field, it appears that the aquifer of interest beneath the site is unconfined.

7.2.1 Transmissivity/Hydraulic Conductivity/Storativity

Some of the assumptions used to evaluate transmissivity, hydraulic conductivity and storativity of the shallow water bearing aquifer system beneath the site, using the Theis method of aquifer pump test analysis, were not met. Among the assumptions not met, the assumption that the aquifer material is an isotropic and homogeneous medium (in other words, the hydraulic and lithologic properties are equal in all directions). The lithology of the site consists primarily of silty sand layers interbedded with sandy silt layers, with a 118 ft long by 14 ft deep gravel filled trench intersecting the site in the area of interest.

Data collected from pumping Well RW1 was analyzed using the Theis method of aquifer pump and recovery test analysis. These methods were used, even though the above mentioned assumptions were not met, since it was expected that the results would still be useful in treatment system design. In the Theis method of analysis, data collected from groundwater observation wells during the aquifer pump and recovery test is used to determine hydraulic characteristics of the site. At this site, approximate hydraulic characteristics were determined for both the gravel filled trench and the combination of the trench and the aquifer material surrounding the trench.

Transmissivity

Using the data collected during the aquifer pump and recovery test from well RW2 indicates that the gravel filled trench may have transmissivity (T) values ranging from 8,600 gallons per day per ft (gpd/ft) to 15,700 gpd/ft. A T value of 8,600 gpd/ft is considered representative of the gravely materials placed in the trench. (Heath, 1987).

Using the data collected during the aquifer pump and recovery test from wells MW3 and MW8 (located in native materials) indicate that the aquifer beneath the site interacting with the gravel trench has a combined T range of 1,670 gpd/ft to 5,560 gpd/ft.

Storativity

Based on the data collected from well RW2 during the aquifer pump test, a storativity (S) of 0.0067 was calculated for the gravel trench. However, this value is considered very low for gravel material in an unconfined aquifer and not representative of the gravels placed in the trench. In an unconfined aquifer, S equals specific yield. Representative specific yield values for medium gravels ranges from 0.13 to 0.22 (Chow, 1964).

Data collected from well MW3 during the aquifer pump test indicate a S value of approximately 0.14. Storativity values for fine grained unconfined aquifers generally range from 0.05 to 0.2 (unitless)(Fetter, 1980). The S value calculated from data from well WM3 is considered representative of the fine grained aquifer material beneath the site.

7.2.2 Radius of Influence

The radius of influence (defined as the shortest distance, in any direction, to the point where water will not flow toward the pumping well) for the pumping well and trench system, pumping at a rate of about 1 gpm for a period of one week, is estimated to be about 40 to 60 feet.

8.0 CONCLUSIONS

Based on the information presented in this report as a part of the most recent investigation, the following conclusions have been derived:

8.1 INSTALLATION OF A GROUNDWATER/PRODUCT RECOVERY TRENCH AND GROUNDWATER/PRODUCT RECOVERY AND TREATMENT EQUIPMENT SYSTEM

- Installation of a groundwater/product recovery trench system was initiated on March 22, 1991 and completed on May 5, 1991. Recovery wells (Sumps) RW1 and RW2, and observation well OW1 were installed in the open trench. The trench was excavated to depths of approximately 15 to 20 feet below the ground surface.

- One single 120 volt, 1/3 hp, 5 gpm electrical submersible pump was installed in each of recovery wells (sumps) RW1 and RW2 in July 1991. The pumps are activated/ controlled by high-

low water level sensors. The pumps withdrawal petroleum hydrocarbon impacted groundwater and pump the water through an above ground 30 gpm rated, gravity, oil-water separator. Water passing through the oil-water separator accumulates in an above ground 500 gallon capacity holding tank. Groundwater accumulating in the holding tank is periodically pumped through 2 ASC-1200 carbon tanks, via a booster pump, to the storm drain.

- The activities associated with system start-up, operation, monitoring, and groundwater/free product recovery are presented in a separate letter report addressed to Ms. Patricia Hannon of the RWQCB - Santa Ana Region and entitled Monitoring and Reporting Program, NPDES Permit No. 90-93 for July/August 1991. The report is dated September 28, 1991.

8.2 GROUNDWATER

- Depth to groundwater was measured in each groundwater monitoring well, at depths ranging from approximately 10.5 to 12.0 feet BGS, on July 24, 1991. Calculated water level elevations at the site, on July 24, 1991 ranged from 12.93 feet to 14.48 feet above mean sea level (MSL). The shallow perched ground water beneath the site flows toward the southwest, with an estimated gradient of 0.007 ft/ft.

- Groundwater monitoring wells MW1, MW3, and MW8, groundwater recovery well RW1, and groundwater observation well OW1 (piezometer) had measurable quantities of free product on the water surface in August 1991.

- Petroleum hydrocarbons and BTEX were not detected in groundwater samples collected from wells MW5, MW6, and MW10, except for toluene detected in groundwater collected from well MW6 at a concentration of 0.002 milligrams/liter (mg/l).

- Petroleum hydrocarbons were detected in groundwater samples collected from wells MW4 and MW7, at concentrations of 0.87 and 2.9 mg/l respectively. BTEX were detected in groundwater samples collected from these two wells. Benzene was detected at concentrations of 0.206 mg/l and 0.414 mg/l in wells MW4 and MW7, respectively.

- Free product was detected in wells MW1, MW3 and MW8, RW1 and OW1. Free product was not detected in other wells installed at the site.

8.3 AQUIFER TEST

- A constant rate pump test with recovery monitoring was conducted at the site. Results of the test indicate that the aquifer and gravel trench interacting with one another have a T value of up to approximately 5,600 gpd/ft, and a S of approximately 0.14 (unitless). The radius of influence for the pumping well and groundwater/ product recovery trench system, pumping at a rate of about 1 gpm for a period of one week is estimated to be about 40 to 60 feet.

Very truly yours,
FREY Environmental



Joe Frey
Principal Registered
Engineering Geologist
CEG #1500

REFERENCES

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TABLE 1

LABORATORY ANALYSES OF GROUNDWATER SAMPLES[1] GOLDEN WEST COLLEGE MAINTENANCE YARD

LABORATORY RESULTS
(mg/l - groundwater)

Sample Number	Depth (feet)	Date Sampled	Petroleum Hydrocarbons[2] Gasoline	Benzene[3]	Toluene	Ethyl Benzene	Xylenes
Groundwater							
MW1		5/25/88	180.0	2.900	11.000	5.300	31.000
MW2		5/25/88	<0.01	0.001	0.002	0.001	0.003
		1/26/89	<0.05	<0.0002	<0.0002	<0.0002	<0.0002
		5/03/90	<1.0	<0.001	<0.001	<0.001	<0.001
MW3		5/25/88	83.0	15.000	18.000	2.900	14.000
MW4		1/26/89	<0.05	<0.0002	<0.0002	<0.0002	<0.0002
		5/03/90	<1.0	0.003	<0.001	<0.001	<0.001
		7/24/91	0.87	0.206	<0.001	0.002	<0.002
MW5		1/26/89	<0.05	<0.0002	<0.0002	<0.0002	<0.0002
		5/03/90	<1.0	<0.001	<0.001	<0.001	<0.001
		7/24/91	<0.05	<0.001	<0.001	<0.001	<0.002
MW6		1/26/89	<0.05	<0.0002	<0.0002	<0.0002	<0.0002
		5/03/90	<1.0	<0.001	<0.001	<0.001	<0.001
		7/24/91	<0.05	<0.001	0.002	<0.001	<0.002
MW7		5/03/90	5.3	0.360	0.085	<0.001	0.016
		7/24/91	2.9	0.414	0.016	0.028	0.133
MW9		5/03/90	<1.0	<0.001	<0.001	<0.001	<0.001
MW10		5/03/90	<1.0	<0.001	<0.001	<0.001	<0.001
		7/24/91	<0.05	<0.001	0.001	<0.001	<0.002
Regulatory Criteria (Groundwater)							
DOHS Action Levels[5]					0.100		
DOHS MCL's[6]				0.001		0.680	1.750

NOTES:

1. Results for groundwter analyses are reported in milligrams per liter (mg/l)
2. Groundwater elevation in feet MSL.
3. Petroleum hydrocarbons analyzed in general accordance with Modified EPA Method No. 8015.
4. Benzene, toluene, xylenes, and ethyl benzene were analyzed in general accordance with EPA Method No. 602 (water).
5. Department of Health Service Action Levels are health based criteria derived from toxicological data and including appropriate factors of safety. DOHS Action Levels are not enforceable drinking water standards, but, are levels at which the DOHS requires water surveyors to take corrective action to reduce the level of contamination in the water they supply.
6. MCL's are enforceable drinking water standards.

TABLE 2

GROUNDWATER ELEVATION/PRODUCT THICKNESS DATA
GOLDEN WEST COLLEGE MAINTENANCE YARD

WELL NUMBER	DATE MEASURED	DEPTH TO WATER (Feet)	DEPTH TO PRODUCT (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (Feet MSL)	WELL ELEVATION (Feet MSL)
MW1	05/25/88	9.16	NA	0.00	15.59	24.75
	03/28/91	12.81	9.77	3.04	11.94	
	07/16/91	11.48	10.30	1.18	13.27	
	07/22/91	11.70	10.49	1.21	13.05	
	07/24/91	11.42	10.97	0.45	13.33	
	08/06/91	11.58	11.03	0.55	13.17	
	08/13/91	11.86	11.68	0.18	12.89	
	08/21/91	11.92	11.61	0.31	12.83	
	08/30/91	11.76	11.65	0.11	12.99	
MW2	05/25/88	9.33	NA	0.00	15.64	24.97
	01/26/89	9.65	NA	0.00	15.32	
	05/03/90	10.25	NA	0.00	14.72	
	03/28/91	10.46	NA	0.00	14.51	
	07/16/91	10.46	NA	0.00	14.51	
	07/24/91	10.49	NA	0.00	14.48	
	08/06/91	10.64	NA	0.00	14.33	
	08/21/91	10.92	NA	0.00	14.05	
	08/30/91	10.98	NA	0.00	13.99	
MW3	05/25/88	8.99	NA	0.00	15.26	24.25
	03/28/91	10.98	9.51	1.47	13.27	
	07/16/91	13.87	9.20	4.67	10.38	
	07/22/91	14.48	9.38	5.10	9.77	
	07/24/91	11.96	10.58	1.38	12.29	
	08/06/91	11.27	10.53	0.74	12.98	
	08/13/91	12.80	10.98	1.82	11.45	
	08/21/91	11.96	11.26	0.70	12.29	
	08/30/91	11.80	11.31	0.49	12.45	
MW4	01/26/89	9.93	NA	0.00	14.08	24.01
	05/03/90	10.54	NA	0.00	13.47	
	03/28/91	10.07	NA	0.00	13.94	
	07/16/91	10.89	NA	0.00	13.12	
	07/24/91	11.08	NA	0.00	12.93	
	08/06/91	11.24	NA	0.00	12.77	
	08/21/91	11.49	NA	0.00	12.52	
	08/30/91	11.51	NA	0.00	12.50	
MW5	01/26/89	9.73	NA	0.00	14.48	24.21
	05/03/90	10.35	NA	0.00	13.86	
	07/16/91	10.67	NA	0.00	13.54	
	07/24/91	10.78	NA	0.00	13.43	
	08/06/91	10.95	NA	0.00	13.26	
	08/21/91	11.22	NA	0.00	12.99	
	08/30/91	11.24	NA	0.00	12.97	

TABLE 2 (Cont'd)

GROUNDWATER ELEVATION/PRODUCT THICKNESS DATA
GOLDEN WEST COLLEGE MAINTENANCE YARD

WELL NUMBER	DATE MEASURED	DEPTH TO WATER (Feet)	DEPTH TO PRODUCT (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (Feet MSL)	WELL ELEVATION (Feet MSL)
MW6	01/26/89	9.24	NA	0.00	15.33	24.57
	05/03/90	9.81	NA	0.00	14.76	
	03/28/91	10.08	NA	0.00	14.49	
	07/16/91	10.59	NA	0.00	13.98	
	07/24/91	10.12	NA	0.00	14.45	
	08/06/91	10.32	NA	0.00	14.25	
	08/21/91	10.59	NA	0.00	13.98	
	08/30/91	10.68	NA	0.00	13.89	
MW7	05/03/90	10.20	NA	0.00	14.26	24.46
	03/28/91	10.09	NA	0.00	14.37	
	07/16/91	10.45	NA	0.00	14.01	
	07/24/91	10.69	NA	0.00	13.77	
	08/06/91	10.87	NA	0.00	13.59	
	08/13/91	11.10	NA	0.00	13.36	
	08/21/91	11.19	NA	0.00	13.27	
	08/30/91	11.23	NA	0.00	13.23	
MW8	07/16/91	13.20	9.91	3.29	11.40	24.60
	07/22/91	13.63	10.27	3.36	10.97	
	07/24/91	11.93	11.20	0.73	12.67	
	08/06/91	11.78	11.53	0.25	12.82	
	08/13/91	12.32	11.93	0.39	12.28	
	08/21/91	12.09	11.90	0.19	12.51	
	08/30/91	11.98	11.90	0.08	12.62	
MW9	05/03/90	9.46	NA	0.00	14.37	23.83
	03/28/91	9.35	NA	0.00	14.48	
	07/16/91	9.62	NA	0.00	14.21	
	07/24/91	9.72	NA	0.00	14.11	
	08/06/91	9.86	NA	0.00	13.97	
	08/21/91	10.09	NA	0.00	13.74	
	08/30/91	10.11	NA	0.00	13.72	
MW10	05/03/90	11.63	NA	0.00	13.90	25.53
	03/28/91	10.38	NA	0.00	15.15	
	07/16/91	12.01	NA	0.00	13.52	
	07/24/91	12.16	NA	0.00	13.37	
	08/06/91	12.32	NA	0.00	13.21	
	08/13/91	12.54	NA	0.00	12.99	
	08/21/91	12.63	NA	0.00	12.90	
	08/30/91	12.65	NA	0.00	12.88	

TABLE 2 (Cont'd)

GROUNDWATER ELEVATION/PRODUCT THICKNESS DATA
GOLDEN WEST COLLEGE MAINTENANCE YARD

WELL NUMBER	DATE MEASURED	DEPTH TO WATER (Feet)	DEPTH TO PRODUCT (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (Feet MSL)	WELL ELEVATION (Feet MSL)
RW1	03/28/91	9.04	NA	0.00		
	05/04/91	9.60	9.56	0.04		
	07/15/91	10.78	10.74	0.04		
	07/16/91	9.90	NA	0.00		
	07/22/91	NR	NR	0.01		
	08/06/91	10.63	NA	0.00		
	08/13/91	11.35	NA	0.00		
	08/21/91	11.15	10.94	0.21		
	08/30/91	NR	NR	0.11		
RW2	03/28/91	9.97	NA	0.00		
	07/15/91	10.62	NA	0.00		
	07/16/91	10.70	NA	0.00		
	08/06/91	11.53	NA	0.00		
	08/13/91	11.10	NA	0.00		
	08/21/91	11.82	NA	0.00		
	08/30/91	NR	NR	0.01		
OW1	08/13/91	12.27	NR			
	08/21/91	12.02	11.73	0.29		
	08/30/91	12.14	NR	0.19		

NOTES:

1) Groundwater elevations in wells with product have not been corrected for product thickness in well.

2) Well elevations surveyed to the top of well casing (TOC). TOC surveyed with respect to Top of Concrete at N.W. corner of Existing Tennis Courts, per page C-1, Corporation Yard Building II, Golden West College, Huntington Beach, CA. Prepared by William Pereira Associates. Wells Surveyed (MW1 through MW10) by Norris-Repke, Inc. on May 21, 1990 and June 14, 1988.

3) Depth to groundwater and product measurements are with respect to top of well casing.

4) NR = Not recorded

5) NA = Not Applicable

TABLE 3

PRODUCT RECOVERY DATA
GOLDEN WEST COLLEGE MAINTANENCE YARD

WELL NUMBER	DATE RECOVERED	GALLONS OF TOTAL FLUIDS RECOVERED		GALLONS OF PRODUCT RECOVERED		METHOD OF RECOVERY
		Per Event	Cumulative	Per Event	Cumulative	
MW1	03/28/91	20	20	3.7	3.7	BAILER (DRY)
	07/22/91	4	24	1.5	5.2	BAILER
	07/24/91	1	25	0.5	5.7	BAILER
	08/06/91	1	26	0.7	6.4	BAILER
	08/13/91	10	36	0.2	6.6	BAILER (DRY)
	08/21/91	2	38	0.4	7.0	BAILER
	08/30/91	5	43	0.1	7.1	BAILER
MW3	03/28/91	20	20	1.8	1.8	BAILER (DRY)
	07/22/91	10	27	6.1	7.9	BAILER
	07/24/91	2	29	1.6	9.5	BAILER
	08/06/91	2	31	0.9	10.4	BAILER
	08/13/91	20	51	2.2	12.6	BAILER (DRY)
	08/21/91	5	56	0.8	13.4	BAILER
	08/30/91	5	61	0.6	14.0	BAILER
MW8	07/22/91	7	7	4.0	4.0	BAILER (DRY)
	07/24/91	0.5	7.5	0.5	4.5	BAILER
	08/06/91	1	8.5	1.0	5.5	BAILER
	08/13/91	10	18.5	0.5	6.0	BAILER (DRY)
	08/21/91	3	21.5	0.2	6.2	BAILER
	08/30/91	5	25.5	0.1	6.3	BAILER
RW1	08/21/91	5	5	1.5	1.5	BAILER
	08/30/91	5	10	1.0	2.5	BAILER

NOTES:

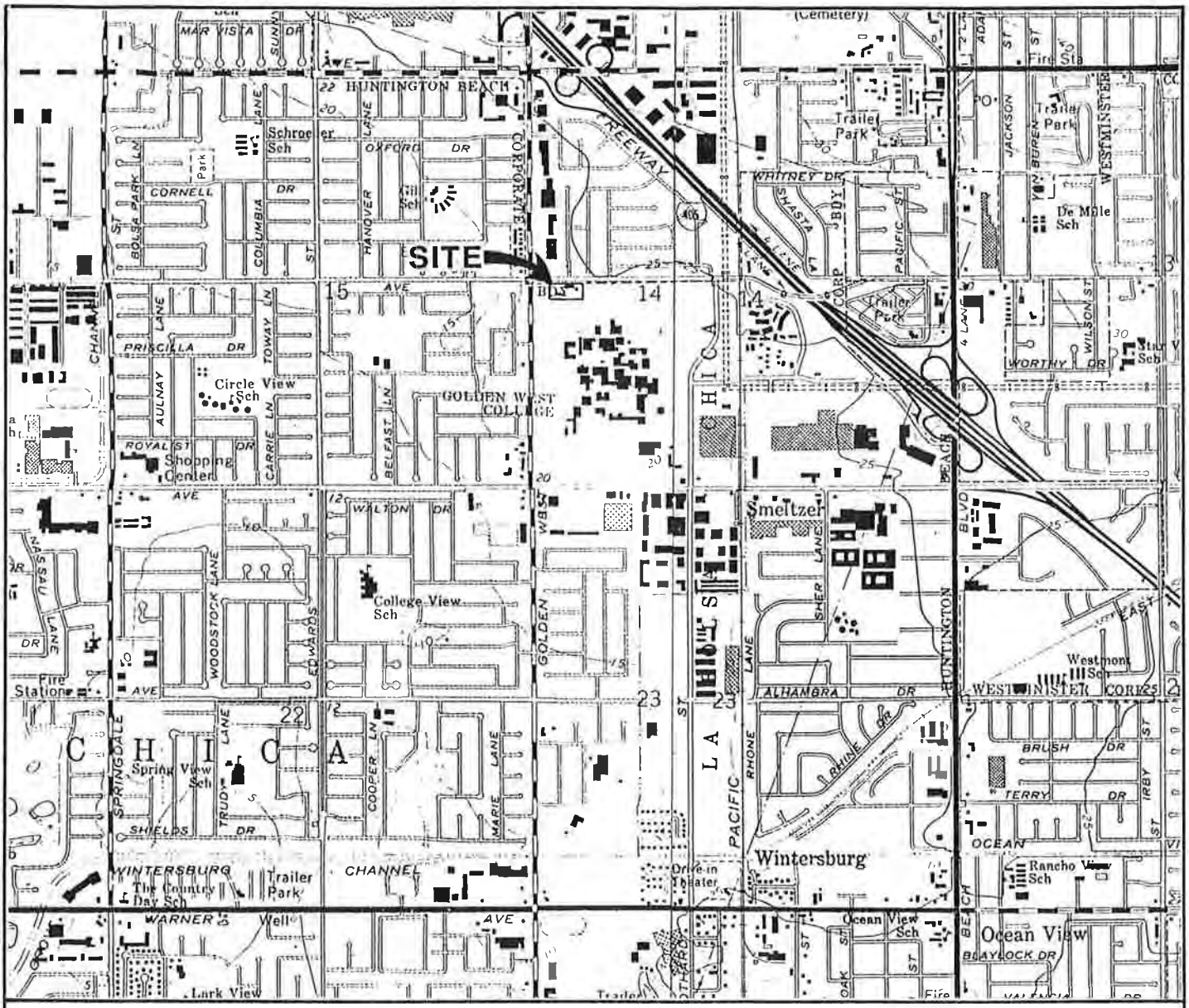
1) Gallons of total fluids reported represent the total amount of groundwater and free product.

2) Gallons of product recovered estimates for 4-inch diamter wells installed in 10.75 inch diamter boreholes are based on product thickness measurements prior to groundwater recovery, and the estimation that approximately 1.2 gallons of product is estimated to enter a well during the bailing of the well. Usually the well is bailed till dry, or the well is bailed until product is no longer apparent in the bailer.

Gallons of product recovered estimates for RW1 (10-inch diameter well) installed in a trench are based on product thickness measurements in a 5 gallon bucket.

3) All quantities are approximate.

4) (DRY) - Indicates that the well is bailed until there is less than 2 feet of fluid in the well casing. Bailing is then discontinued but can be resumed shortly therafter upon accumulation of more fluids in the well.

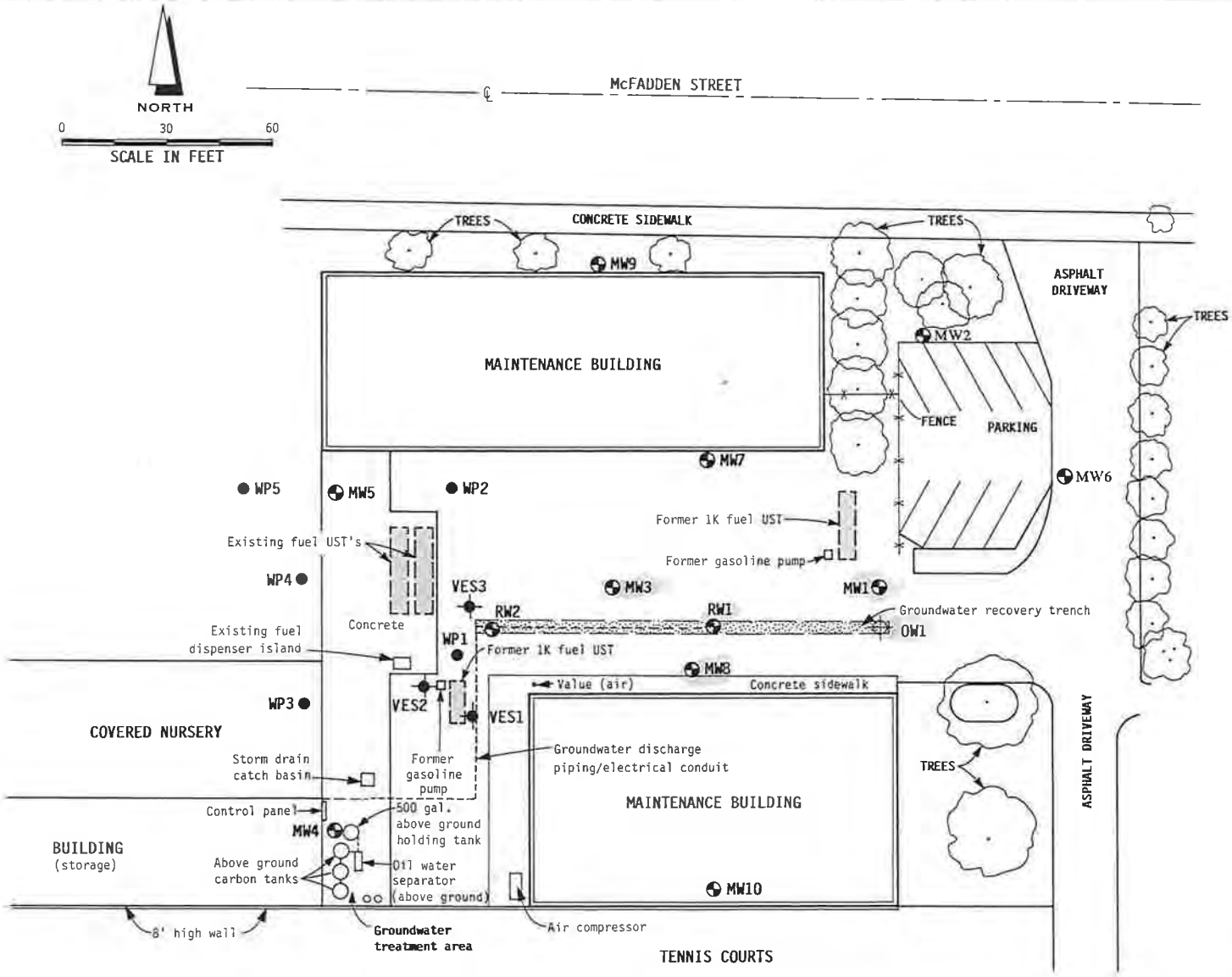


SOURCE: USGS Seal Beach and Newport Beach Quadrangles, California 7.5 Minute Series, 1965, Photorevised 1981

FREY ENVIRONMENTAL

SITE VICINITY MAP

CLIENT COAST COMMUNITY	SCALE SHOWN
DRAWN BY NV	PROJ.NO. 006-02
CHECKED BY JWF	FIGURE 1
DATE MARCH 1990	



EXPLANATION

- MW1 GROUNDWATER MONITORING WELL LOCATION
- RW1 GROUNDWATER RECOVERY WELL LOCATION
- VES1 VAPOR EXTRACTION WELL LOCATION
- WP1 HAND AUGER/WELL POINT LOCATION
- OW1 GROUNDWATER OBSERVATION WELL

NOTES:
1) All locations and dimensions are approximate.
2) Well elevations for MW7-MW10 surveyed by Norris-Repke on May 21, 1990.
   Well locations and elevations, MW1-MW6 surveyed by Norris-Repke, Inc. (14 June 1988).
3) BENCHMARK:
   Elevation-T.B.M.El. 24.78 Location-Top of conc. at N.W. Corner exist. tennis courts, per Page C-1, Corporation Yard Building II, Golden West College, Huntington Beach CA, Prepared by William Pereira Associates)

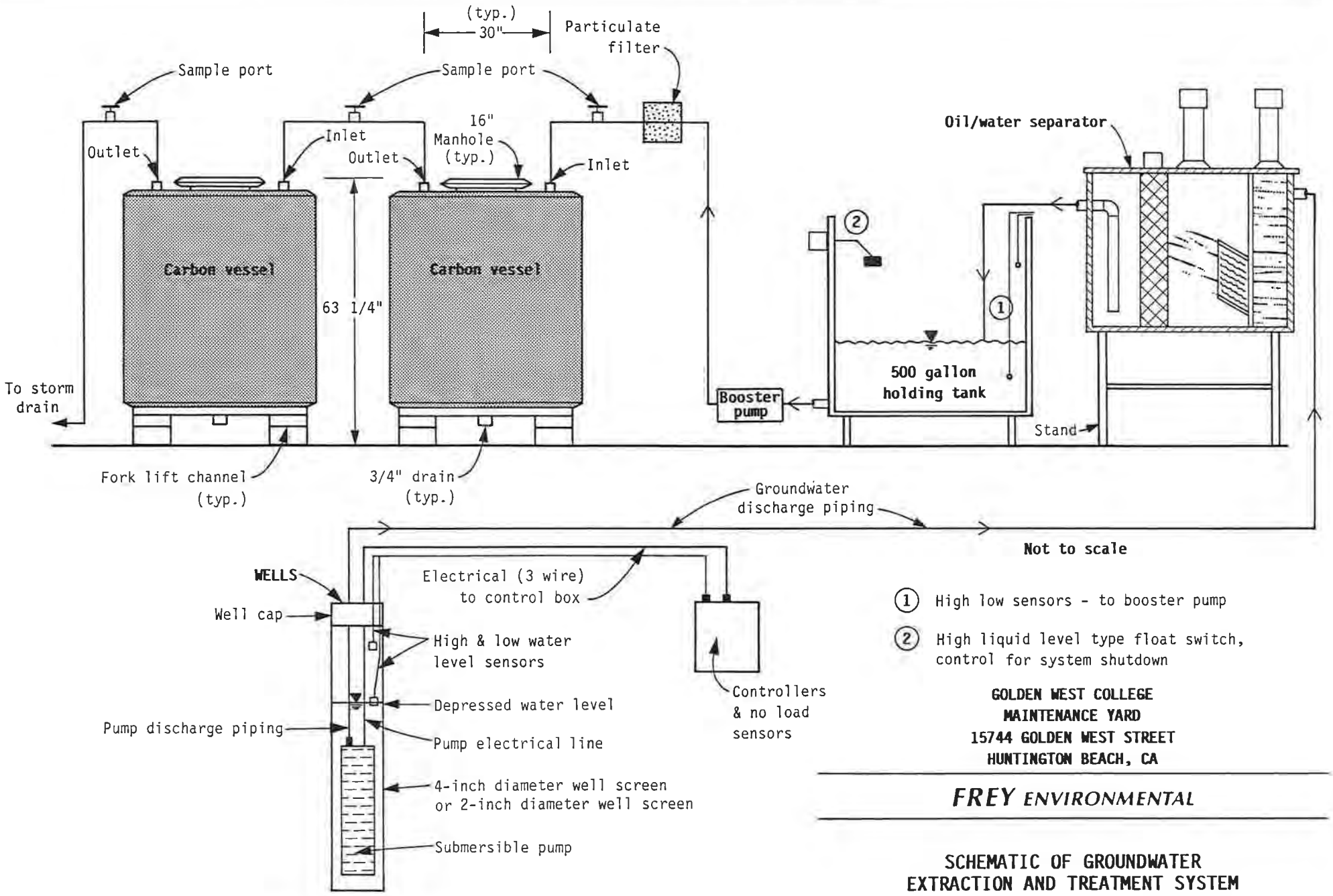
SOURCE: Base map: William L. Pereira Associates
Urbanus Square, Corona Del Mar.

GOLDEN WEST COLLEGE
MAINTENANCE YARD
15744 GOLDEN WEST STREET
HUNTINGTON BEACH, CA

FREY ENVIRONMENTAL

SITE SKETCH
SHOWING GROUNDWATER MONITORING/RECOVERY, VAPOR EXTRACTION AND GROUNDWATER RECOVERY TRENCH LOCATIONS

Client: GOLDEN WEST COLLEGE Project No.: 006-02 Date: SEPTEMBER 1991 Figure 2

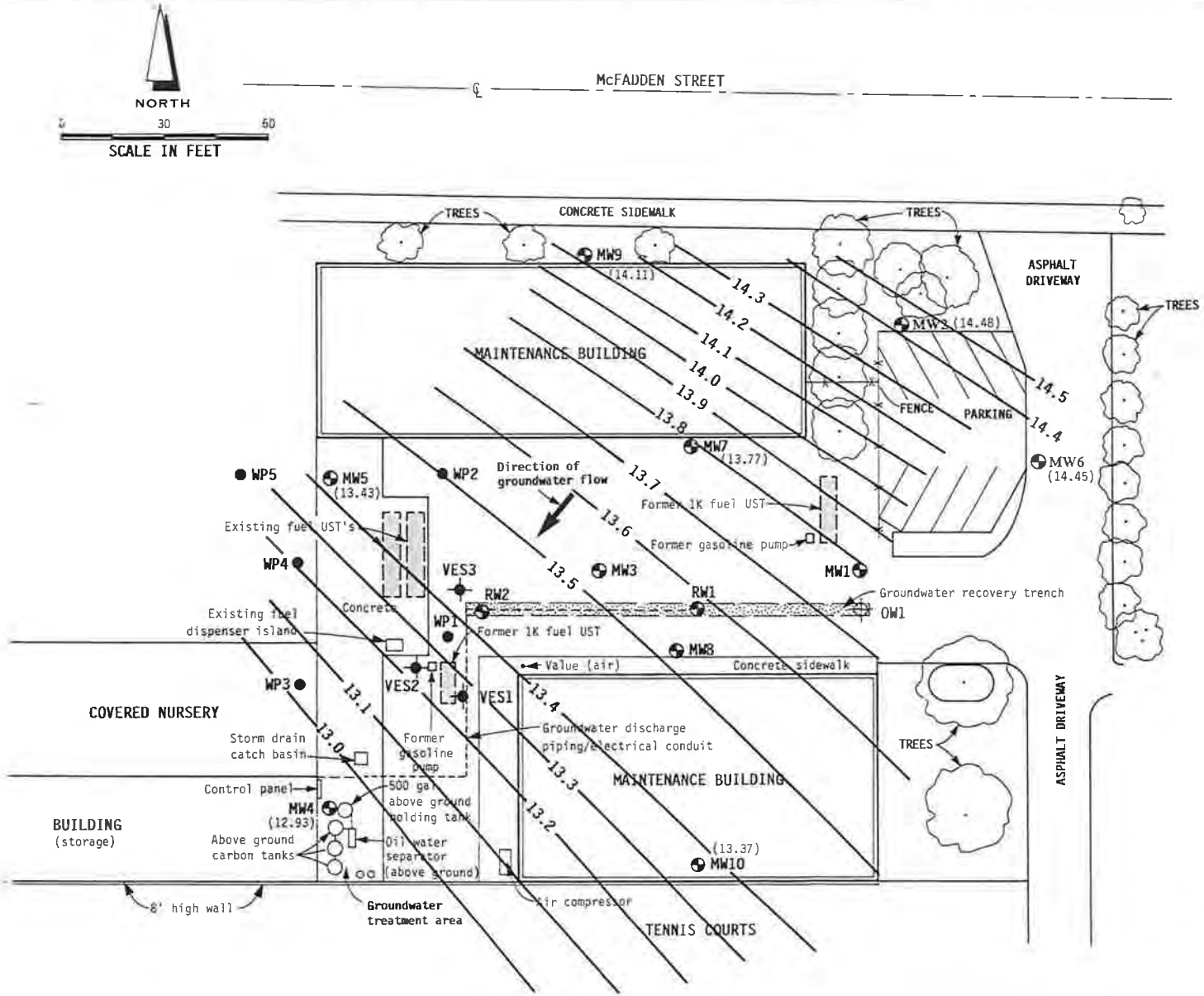


GOLDEN WEST COLLEGE
MAINTENANCE YARD
15744 GOLDEN WEST STREET
HUNTINGTON BEACH, CA

FREY ENVIRONMENTAL

SCHEMATIC OF GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

Client: **GOLDEN WEST COLLEGE** Project No.: **006-02** Date: **SEPTEMBER 1991** Figure **3**



EXPLANATION

- MW1 GROUNDWATER MONITORING WELL LOCATION
- RW1 GROUNDWATER RECOVERY WELL LOCATION
- VES1 VAPOR EXTRACTION WELL LOCATION
- WP1 HAND AUGER/WELL POINT LOCATION
- OW1 GROUNDWATER OBSERVATION WELL
- (14.48) With groundwater elevation in feet MSL as measured on 7/24/91
- —13.4— CONTOUR OF EQUAL GROUNDWATER ELEVATION IN feet MSL (7/24/91)

NOTES:

1) All locations and dimensions are approximate.
2) Well elevations for MW7-MW10 surveyed by Norris-Repke on May 21, 1990.
   Well locations and elevations, MW1-MW6 surveyed by Norris-Repke, Inc. (14 June 1988).
3) BENCHMARK:
   Elevation-T.B.M.El. 24.78 Location-Top of conc. at N.W. Corner exist. tennis courts, per Page C-1, Corporation Yard Building II, Golden West College, Huntington Beach CA, Prepared by William Pereira Associates)

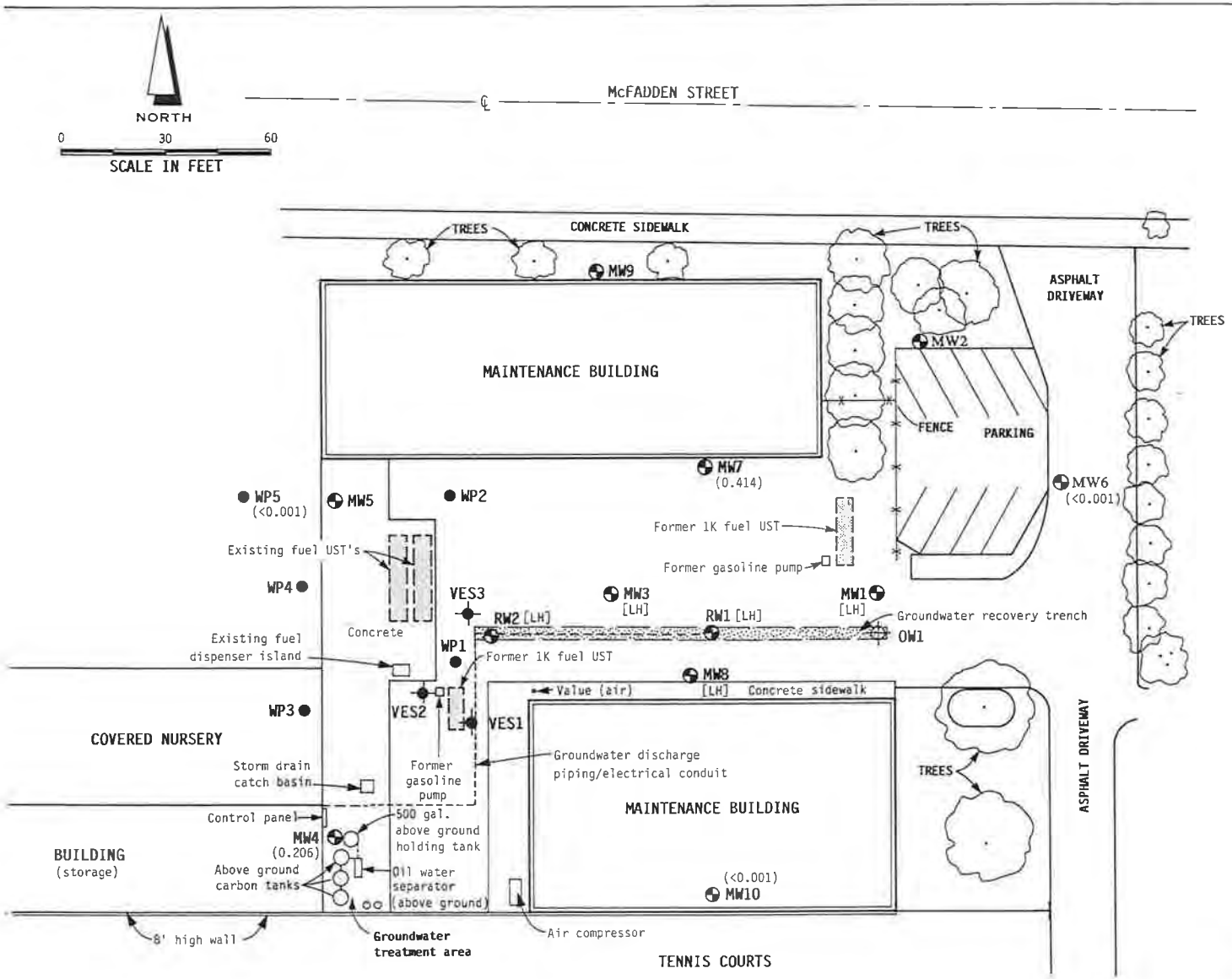
SOURCE: Base map: William L. Pereira Associates
Urbanus Square, Corona Del Mar.

GOLDEN WEST COLLEGE
MAINTENANCE YARD
15744 GOLDEN WEST STREET
HUNTINGTON BEACH, CA

FREY ENVIRONMENTAL

SITE SKETCH
WITH GROUNDWATER ELEVATIONS
AND GRADIENT, JULY 1991

Client: GOLDEN WEST COLLEGE Project No.: 006-02 Date: SEPTEMBER 1991 Figure 4



EXPLANATION

- MW1 GROUNDWATER MONITORING WELL LOCATION
- RW1 GROUNDWATER RECOVERY WELL LOCATION
- VES1 VAPOR EXTRACTION WELL LOCATION
- WP1 HAND AUGER/WELL POINT LOCATION
- OW1 GROUNDWATER OBSERVATION WELL
- [LH] Liquid hydrocarbons
- (0.414) With benzene concentration in groundwater 7/24/91

NOTES:

1) All locations and dimensions are approximate.
2) Well elevations for MW7-MW10 surveyed by Norris-Repke on May 21, 1990.
   Well locations and elevations, MW1-MW6 surveyed by Norris-Repke, Inc. (14 June 1988).
3) BENCHMARK:
   Elevation-T.B.M.El. 24.78 Location-Top of conc. at N.W. Corner exist. tennis courts, per Page C-1, Corporation Yard Building II, Golden West College, Huntington Beach CA, Prepared by William Pereira Associates)

SOURCE: Base map: William L. Pereira Associates
Urbanus Square, Corona Del Mar.

GOLDEN WEST COLLEGE
MAINTENANCE YARD
15744 GOLDEN WEST STREET
HUNTINGTON BEACH, CA

FREY ENVIRONMENTAL

SITE SKETCH
WITH BENZENE CONCENTRATIONS
IN GROUNDWATER, JULY 1991

Client: GOLDEN WEST COLLEGE Project No.: 006-02 Date: SEPTEMBER 1991 Figure 5

APPENDIX A
FIELD PROCEDURES

A.1 WATER SAMPLE COLLECTION PROCEDURES

1. The water samples were obtained after purging the wells on July 24, 1991. Approximately 10 to 30 gallons of water was purged from each well on-site.

2. Measurements were made for pH, conductivity, and temperature, and the clearness of the water noted during purging. See Table A-1.

3. The water level and depth to the bottom of the wells were measured using a conductance probe and a fiber measuring tape. The probes, bailer, and tapes were rinsed in a solution of TSP followed by deionized water prior to use.

4. A stainless steel bailer was used for sampling the wells. The bailer was washed in TSP solution followed by a tap water and a deionized water rinse. Dedicated nylon cord was used with the bailer.

5. The water samples were collected and placed into laboratory-supplied containers.

6. The samples were placed in an ice chest and cooled to a temperature of approximately 40 degrees Fahrenheit following collection.

7. The samples were delivered to the laboratory within 24 hours of collection. Sample handling, transport, and delivery to the laboratory are documented using Chain-of-Custody procedures and appropriate forms.

TABLE A-1

WELL SAMPLING DATA
GOLDEN WEST COLLEGE[1]

Sample Loc.	Date	Sample Type	Depth to Static Water Level (feet below top of casing) before purging	Depth to water after purging at time of sampling	Time elapsed between discontinuance of purging & sample collection (minutes)	Top of casing elevation[2]	Temp. (°F)	pH (stand. units)	Specific conductivity (umhos)	Purge Volume& (gallon) method	Sample Turbidity
MW2	5/03/90	Groundwater	10.25	12.10	145	24.97	73.9	6.91	5,540	43 Bailer	clear
MW4	5/03/90	Groundwater	10.54	NR	95	24.01	74.0	7.14	5,300	25 Bailer	clear
	7/24/91		11.08	11.28	NR		70.6	6.74	3,720	30 Pump	clear
MW5	5/03/90	Groundwater	10.35	13.40	70	24.21	73.0	7.10	5,000	25 Bailer	clear
	7/24/91		10.78	10.78	NR		72.6	6.48	3,590	20 Pump	clear
MW6	5/03/90	Groundwater	9.81	14.30	145	24.57	73.0	7.16	6,130	25 Bailer	clear
	7/24/91		10.12	13.09	NR		73.0	6.77	5,370	23 Bailer	clear
MW7	5/03/90	Groundwater	10.20	16.80	160	24.46	73.4	7.32	5,150	30 Bailer	clear
	7/24/91		10.69	17.35	NR		74.1	7.15	4,500	16 Bailer	clear
MW9	5/3/90	Groundwater	9.46	9.70	165	23.83	72.8	6.70	4,260	55 Bailer	clear
MW10	5/11/90	Groundwater	11.63	13.54	60	25.53	NR	NR	NR	15 Bailer	clear
	7/24/91		12.16	12.30	NR		72.9	7.00	2,980	10 Bailer	clear

Notes:

1 See Appendix A for groundwater sampling procedures.
2 Top of Casing elevation with respect to Mean Sea Level (MSL).

APPENDIX B

LABORATORY REPORTS

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Frey Environmental		Date Sampled:	07/24/91
421 38th Street		Date Received:	07/26/91
Newport Beach, CA 92663		Date Extracted:	P/T
		Date Analyzed:	07/29/91
		CEL Batch No.:	91-07-208
Attn: Joe Frey			
RE: Golden West Maintenance/006-02		Method:	EPA 8015M

All total petroleum hydrocarbon concentrations are reported in mg/L (ppm) using gasoline as a standard.

Sample Number	Concentration	Det'n Limit
MW10-W1	ND	0.05
MW6-W1	ND	0.05
MW5-W1	ND	0.05
MW4-W1	0.87	0.05
MW7-W1	2.9	0.05

Reviewed and Approved William H. Christensen on 08/01/1991.

William H. Christensen
Laboratory Operations
Manager

EPA 8015M is conducted in accordance with the DHS Method for Total Petroleum Hydrocarbons.

ND denotes not detected at indicated detection limit.

Each sample was received by CEL in a chilled state, intact and with chain-of-custody attached.

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Frey Environmental		Date Sampled:	07/24/91
421 38th Street		Date Received:	07/26/91
Newport Beach, CA 92663		Date Extracted:	P/T
		Date Analyzed:	07/29/91
		CEL Batch No.:	91-07-208
		Page 1 of 2	
Attn: Joe Frey			
RE: Golden West Maintenance/006-02		Method:	EPA 602

All concentrations are reported in ug/L (ppb).

	Concentration	Det'n Limit
Sample Number: MW10-W1		
Benzene	ND	1
Toluene	1	1
Ethylbenzene	ND	1
Total Xylenes	ND	2
Sample Number: MW6-W1		
Benzene	ND	1
Toluene	2	1
Ethylbenzene	ND	1
Total Xylenes	ND	2
Sample Number: MW5-W1		
Benzene	ND	1
Toluene	ND	1
Ethylbenzene	ND	1
Total Xylenes	ND	2
Sample Number: MW4-W1		
Benzene	206	1
Toluene	ND	1
Ethylbenzene	2	1
Total Xylenes	ND	2

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Frey Environmental		Date Sampled:	07/24/91
421 38th Street		Date Received:	07/26/91
Newport Beach, CA 92663		Date Extracted:	P/T
		Date Analyzed:	07/29/91
		CEL Batch No.:	91-07-208
		Page 2 of 2	
Attn: Joe Frey			
RE: Golden West Maintenance/006-02		Method:	EPA 602

All concentrations are reported in ug/L (ppb).

	Concentration	Det'n Limit
Sample Number: MW7-W1		
Benzene	414	1
Toluene	16	1
Ethylbenzene	28	1
Total Xylenes	133	2

Reviewed and Approved William H. Christensen on 08/01/1991.

William H. Christensen
Laboratory Operations
Manager

ND denotes not detected at indicated detection limit.

Each sample was received by CEL in a chilled state, intact and with chain-of-custody attached.

CALSCIENCE ENVIRONMENTAL LABORATORIES, INC.
11631 SEABOARD CIRCLE
STANTON, CA 90680
TEL: (714) 895-5494 • FAX: (714) 894-7501

CHAIN OF CUSTODY RECORD

Date 7/24/91

Page 1 of 1

LABORATORY CLIENT:* FREY ENVIRONMENTAL	CLIENT PROJECT NAME / NUMBER: Golden West Maintenance / 006-02
ADDRESS: 2817 A Lafayette Avenue	PROJECT CONTACT: Joe Frey
CITY Newport Beach STATE CA ZIP 92663	SAMPLER(S): (SIGNATURE) Jeff Nelson
TEL: (714) 723-1645 FAX: (714) 723-1854	

TURN AROUND TIME DESIRED: ☐ SAME DAY (100 %) ☐ 24 HOURS (50%) ☐ 48 HOURS (25%) ☐ 10 DAYS
Prior confirmation with CEL is recommended for rush samples

LABORATORY WORK ORDER NUMBER : _____

SHIPMENT METHOD:

AFTER ANALYSES, SAMPLES ARE TO BE: ☐ DISPOSED OF ☐ RETURNED TO CLIENT ☐ STORED (30 DAYS MAX.) ☐ OTHER _____

SPECIAL INSTRUCTIONS:

SAMPLE ID	LOCATION DESCRIPTION	SAMPLING DATE	SAMPLING TIME	SAMPLE TYPE WATER Comp.	SAMPLE TYPE WATER Grab.	SAMPLE TYPE AIR Integ.	SAMPLE TYPE AIR Grab.	SOLID / SOIL	NO. OF CONTAINERS	TESTS REQUIRED
MW 10-W1		7/24/91			X				2 40ml	8015M, 602
MW 6-W1		↓			X				3 40ml	8015M, 602
MW 5-W1					X				↓	8015M, 602
MW 4-W1					X					8015M, 602
MW 7-W1		↓			X					8015M, 602

Relinquished by: (Signature) Jeff Nelson	Received by: (Signature) Martha Austin	Date: 7/26/91	Time: 3:45
Relinquished by: (Signature) Martha Austin	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received for Laboratory by: (Signature) A Patel	Date: 7/26/91	Time: 5:30 pm

* The report will be forwarded to this address

DISTRIBUTION: White with report, Yellow to CEL, Pink to Courier

SOURCE: Adapted from U.S. EPA, 1985

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Frey Environmental		Date Sampled:	04/09/91
421 38th Street		Date Received:	04/12/91
Newport Beach, CA 92663		Date Extracted:	P/T
		Date Analyzed:	04/14/91
		CEL Batch No.:	91-04-063
Attn: Joe Frey			
RE: Golden West Maintenance 006-02		Method:	EPA 8015M

All total petroleum hydrocarbon concentrations are reported in mg/L (ppm) using gasoline as a standard.

Sample Number	Concentration	Det'n Limit
Effluent	0.083	0.050

Reviewed and Approved William H Christensen on 04/19/1991.
William H. Christensen
Laboratory Operations
Manager

EPA 8015M is conducted in accordance with the DHS Method for Total Petroleum Hydrocarbons.

ND denotes not detected at indicated detection limit.

Each sample was received by CEL in a chilled state, intact and with chain-of-custody attached.

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Frey Environmental		Date Sampled:	04/09/91
421 38th Street		Date Received:	04/12/91
Newport Beach, CA 92663		Date Extracted:	P/T
		Date Analyzed:	04/13/91
		CEL Batch No.:	91-04-063
Attn: Joe Frey			
RE: Golden West Maintenance 006-02		Method:	EPA 602

All concentrations are reported in ug/L (ppb).

	Concentration	Det'n Limit
Sample Number: Effluent		
Benzene	ND	1
Toluene	1.3	1
Ethylbenzene	ND	1
Total Xylenes	7.5	2

Reviewed and Approved William H. Christensen on 04/19/1991.
William H. Christensen
Laboratory Operations
Manager

ND denotes not detected at indicated detection limit.

Each sample was received by CEL in a chilled state, intact and with chain-of-custody attached.

11631 Seaboard Circle, Stanton, CA 90680 • TEL: (714) 895-5494 • FAX: (714) 894-7501

CALSCIENCE ENVIRONMENTAL LABORATORIES, INC.
11631 SEABOARD CIRCLE
STANTON, CA 90680
TEL: (714) 895-5494 • FAX: (714) 894-7501

CHAIN OF CUSTODY RECORD

Date 4/12/91

Page 1 of 1

LABORATORY CLIENT:* Frey Environmental	CLIENT PROJECT NAME / NUMBER: Golden West Maintenance 006-02
ADDRESS: 2817 A Lafayette Ave	PROJECT CONTACT:
CITY Newport Beach STATE Ca ZIP 92663	SAMPLER(S): (SIGNATURE) Jeff Nelson
TEL: 714 650 6788 FAX:	

TURN AROUND TIME DESIRED: ☐ SAME DAY (100 %) ☐ 24 HOURS (50%) ☐ 48 HOURS (25%) ☒ 10 DAYS
Prior confirmation with CEL is recommended for rush samples

LABORATORY WORK ORDER NUMBER : _____

SHIPMENT METHOD:

AFTER ANALYSES, SAMPLES ARE TO BE: ☐ DISPOSED OF ☐ RETURNED TO CLIENT ☐ STORED (30 DAYS MAX.) ☐ OTHER _____

SPECIAL INSTRUCTIONS:

SAMPLE ID	LOCATION DESCRIPTION	SAMPLING DATE	SAMPLING TIME	SAMPLE TYPE WATER Comp.	SAMPLE TYPE WATER Grab.	SAMPLE TYPE AIR Integ.	SAMPLE TYPE AIR Grab.	SOLID / SOIL	NO. OF CONTAINERS	TESTS REQUIRED
Effluent H2O		4/9/91	295		X				2	M8015 8020/602

Relinquished by: (Signature) Jeff Nelson	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received for Laboratory by: (Signature)	Date: 4/12/91	Time: 10:30am

* The report will be forwarded to this address

DISTRIBUTION: White with report, Yellow to CEL, Pink to Courier

SOURCE: Adapted from U.S. EPA, 1985

APPENDIX C

AQUIFER TEST PROCEDURES

C.1 INTRODUCTION

A constant rate pump test with recovery monitoring was conducted at the site on April 8 and 9, 1991. Prior to the test a specific capacity test was conducted on well RW1 on April 4 and 5, 1991. The purpose of the specific capacity tests on April 4 and 5, were primarily to: 1) establish a pumping rate that would not quickly dewater the well, thereby permitting the conduct of the test over a longer period and 2) establish probable pumping rates for the proposed system in order to properly select pumps, treatment equipment and design the proposed remediation system.

Well RW1 was used for groundwater withdrawal for both the specific capacity and constant rate pump tests. Wells RW2, and MW1 through MW10 were used for monitoring groundwater level changes during the withdrawal of groundwater from well RW1. Groundwater was withdrawn from RW1 for a period of approximately 1 hour on April 4, 1991, 2.8 hours on April 5, 1991 and 14.6 hours on April 8 and 9, 1991. Recovery of groundwater in the discharge well and the groundwater wells monitored during pumping, was monitored immediately following discontinuance of pumping for a period of about 13 hours on April 9, 1991.

Groundwater recovery well/sump RW1 was pumped at a rate of about 1 gallon per minute (gpm) on April 8, 1991. Pumping at 1 gpm resulted in a water level decline of about 3.0 feet in well RW1 after 877 minutes (14.6 hours).

Groundwater levels in well RW2 (screened within the trench backfill) declined as much as 1.12 feet as a result of groundwater withdrawal from well RW1. A groundwater level decline was measured in all the wells monitored, in response to groundwater withdrawal from well RW1. The largest groundwater level decline was observed in well MW8, located approximately 12 feet south of the groundwater recovery well. Well MW8, which had product, at a thickness of about 2.85 feet at the time of the aquifer test, was observed to have a groundwater level decline of up to 1.2 feet. This decline was observed after about 900 minutes after the aquifer test began.

The largest groundwater level decline in a well, without free product, and outside of the trench, was observed in well MW7 located approximately 45 feet from well RW1. A decline of about 0.2 feet was measured in well MW7 after 1380 minutes (23 hours), 530 minutes after pumping ceased in well RW1. Well MW6, located approximately 110 feet northeast of well RW1 was least affected by pumping. A decline of 0.02 feet was observed in well MW6.

C.2 TEST PROCEDURES

Pumping Well

Well RW1 is constructed of a 10-inch diameter schedule 40 PVC casing and, eight row, 0.050 inch slot, 4 slots per inch, screen. The well is screened from approximately 7.3 to 19.3 feet below the ground surface. Blank casing extends from 7.3 to 1.3 feet below the ground surface. Well RW1 was constructed on March 24, 1991.

Observation Wells

Observation wells used to monitor the drawdown in the aquifer included wells RW2, and MW1 through MW10. These wells were located at distances of from approximately 18 to 122 feet from the discharge well.

Aquifer Test

The constant rate test was conducted on April 8 and 9, 1991. The pumping well discharge rate was maintained at a constant rate of about 1 gallons per minute. This rate was verified periodically throughout the test using a visi-float flow meter and a calibrated 2 gallon container.

The groundwater pump was set at a depth of about 15 feet below the top of the casing. Water was discharged via a 3/4 inch hose through carbon canisters to the storm drain. Approximately 877 gallons of water were pumped through the carbon to the storm drain during the test.

Test Equipment

Water levels in the pumping and groundwater monitoring wells were measured prior to, and during the aquifer test, and during the recovery test using a Solinist water level indicator, and recorded on aquifer test data sheets.

Water levels were recorded manually in the pumping and groundwater monitoring wells, prior to and during the conduct of the aquifer test and during the recovery test. Aquifer test field data sheets are presented.

C.3 ANALYSES

The data collected was analyzed using various methods for point source aquifer tests, in order to assess the hydraulic characteristics of the aquifer. The data analyses appears in Figures C-1 through C-5. The methods for assessing the hydraulic characteristics herein included: 1) the matching of test data to theoretical curves (log-log axes) derived from the equations of Theis (1935) and, 2) the plotting of recovery test data on semi-logarithmic graph paper and determining a T value using equations derived by Theis (1935).

Theis Method of Analysis

In the Theis nonequilibrium analysis for aquifers with fully penetrating wells, log-log plots of drawdown versus radius corrected time since pumping began is superimposed on a type curve for wells fully penetrating aquifer (Lohman, 1970). A match point is placed on the plot corresponding to the point at which each non-dimensional axis value of the type curve is equal to unity. The nonequilibrium equations used to determine transmissivity and storage coefficient using this method are:

$$T = Q\,W(u)/4\,s \qquad \text{(Equation 1)}$$

and

$$S = Tut/r^2 \qquad \text{(Equation 2)}$$

where :

T = The transmissivity, in gallons per day per foot (gpd/ft).

s = The drawdown at the matchpoint, in feet (ft)

S = The storage coefficient of the aquifer

r = The distance from the observation well to the pumped well

t = Time of pumping at the match point

W(u)= The non-dimensional y-axis value of the Theis type curve corresponding to the match point, also known as the well function

u = The reciprocal of the non-dimensional x-axis value of the Theis type curve corresponding to the match point, and the argument of the well function

Q = Pumping rate

Once the values of t and s corresponding to the match point are obtained, equation 1 is used to estimate T, which is then used to estimate the storage coefficient using Equation 2.

Theis Recovery Method of Analysis

At the end of a pumping test, water level in the pumping well and observation wells is measured as it rises. The resulting water level rise is known as residual drawdown (s'). Water level measurements are recorded until a minimum 90 percent recovery has occurred. The record of time t, the elapsed time since the pump test started and time t', the time since the recovery test started versus s' is kept. A plot of s' versus the logarithm of t/t' is then made. This plot forms a straight line, the slope, ds', is used in the following equation to determine transmissivity.

(1) $T = 2.30\ Q/\ 4\ pi\ ds'$. Where;

T = transmissivity,
Q = discharge rate from pumping well,
pi = 3.141
ds'= residual drawdown

When using equation (1), consistent units must be used in order for the results to be correct. No comparable value of storativity can be determined by this recovery test method.

Log-log and semi-log graphs for monitoring wells RW2 and MW3 and MW8, during pumping and recovery appear in Figures C-1 through C-5. On drawdown versus time plots, the measured drawdown is plotted against the elapsed time of pumping. Data from the observation well in an "ideal" aquifer (an aquifer satisfying the Theis assumptions) would plot along the same curve using the axes as appears in the plot.

The recovering water levels, measured in the observation wells, are plotted against the total elapsed test time divided by the time since pumping stopped (t/t').

Figure C-1

Log-log plot of time vs drawdown for well RW2 with Theis curve match.

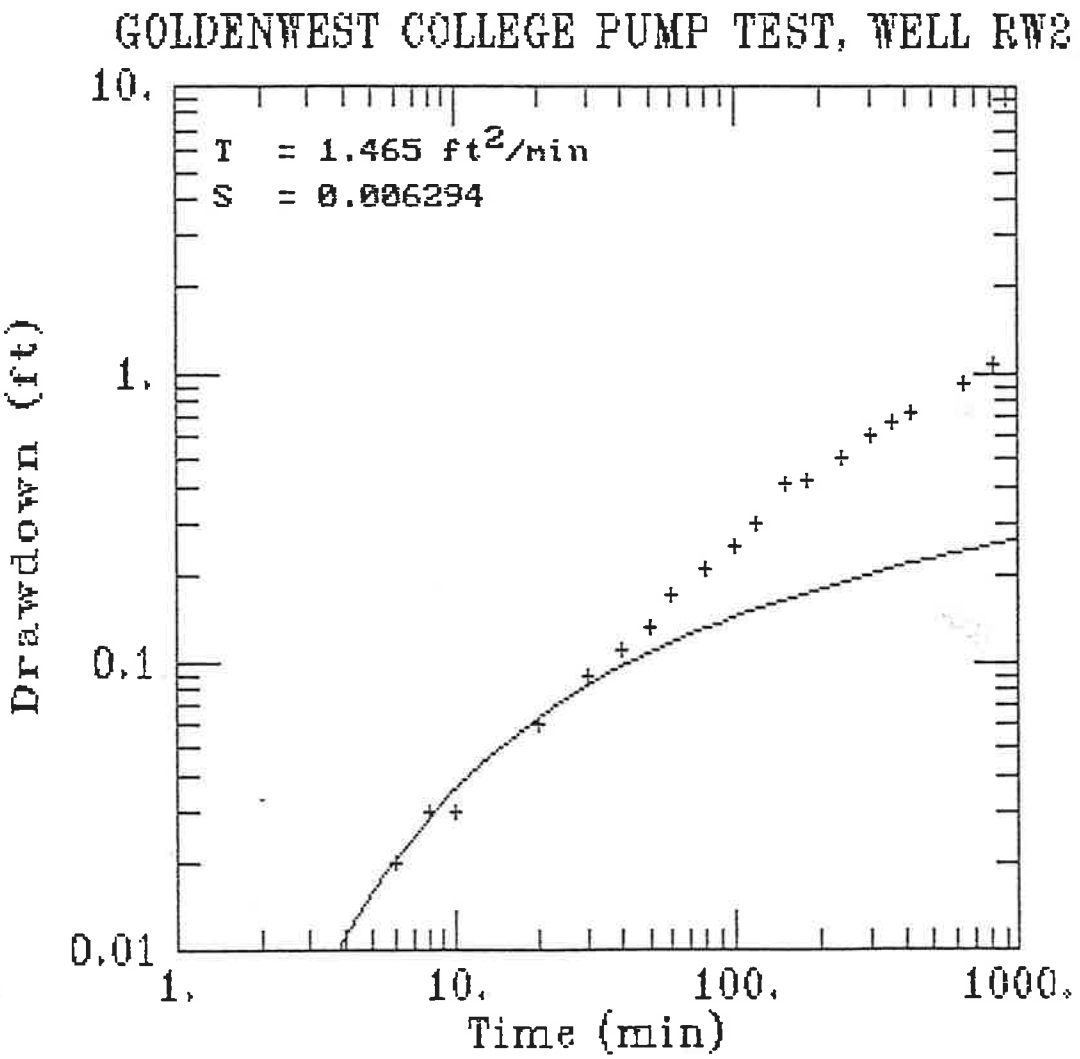


Figure C-2

Log-log plot of time vs drawdown for
well MW3 with Theis curve match.

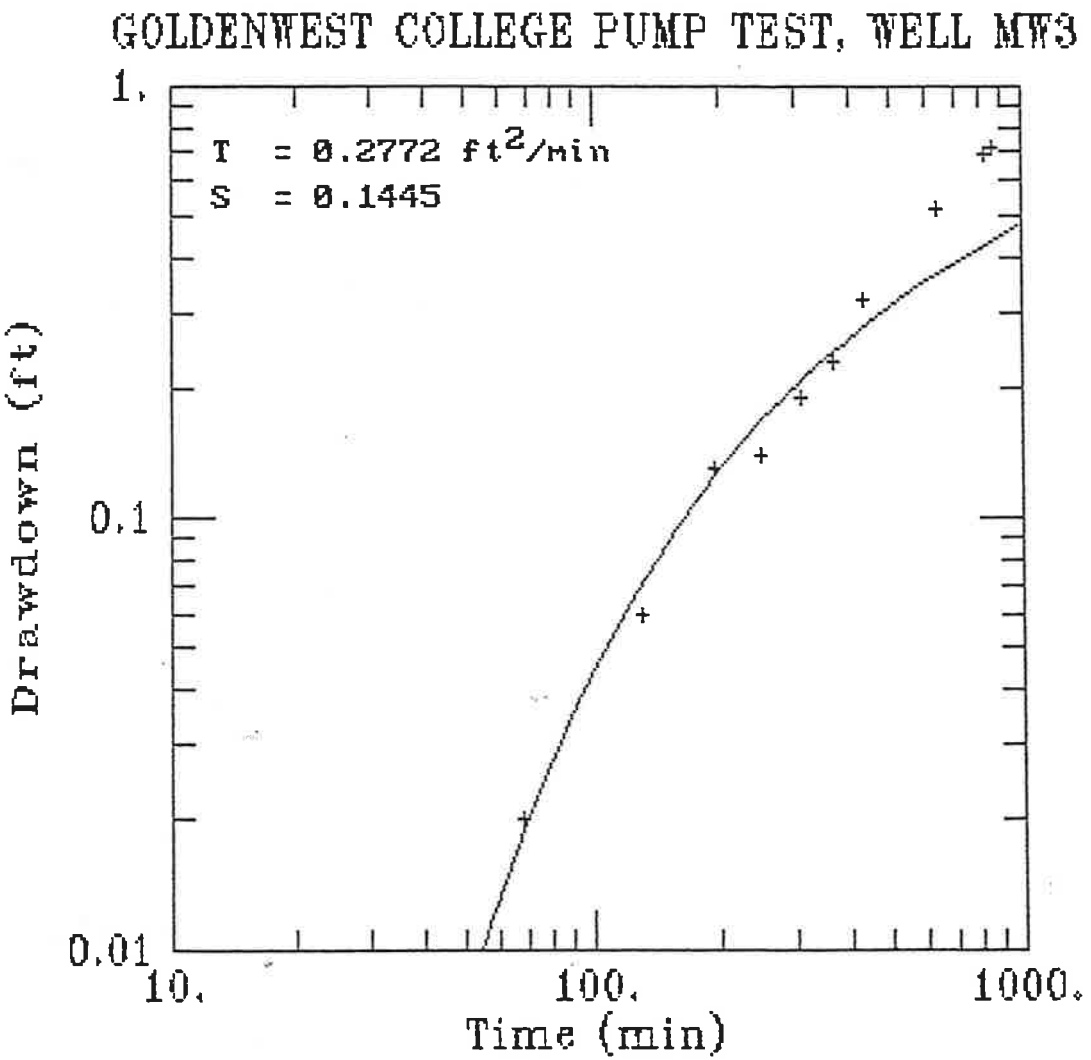


Figure C-3

Log-log plot of time vs drawdown for
well MW8 with Theis curve match.

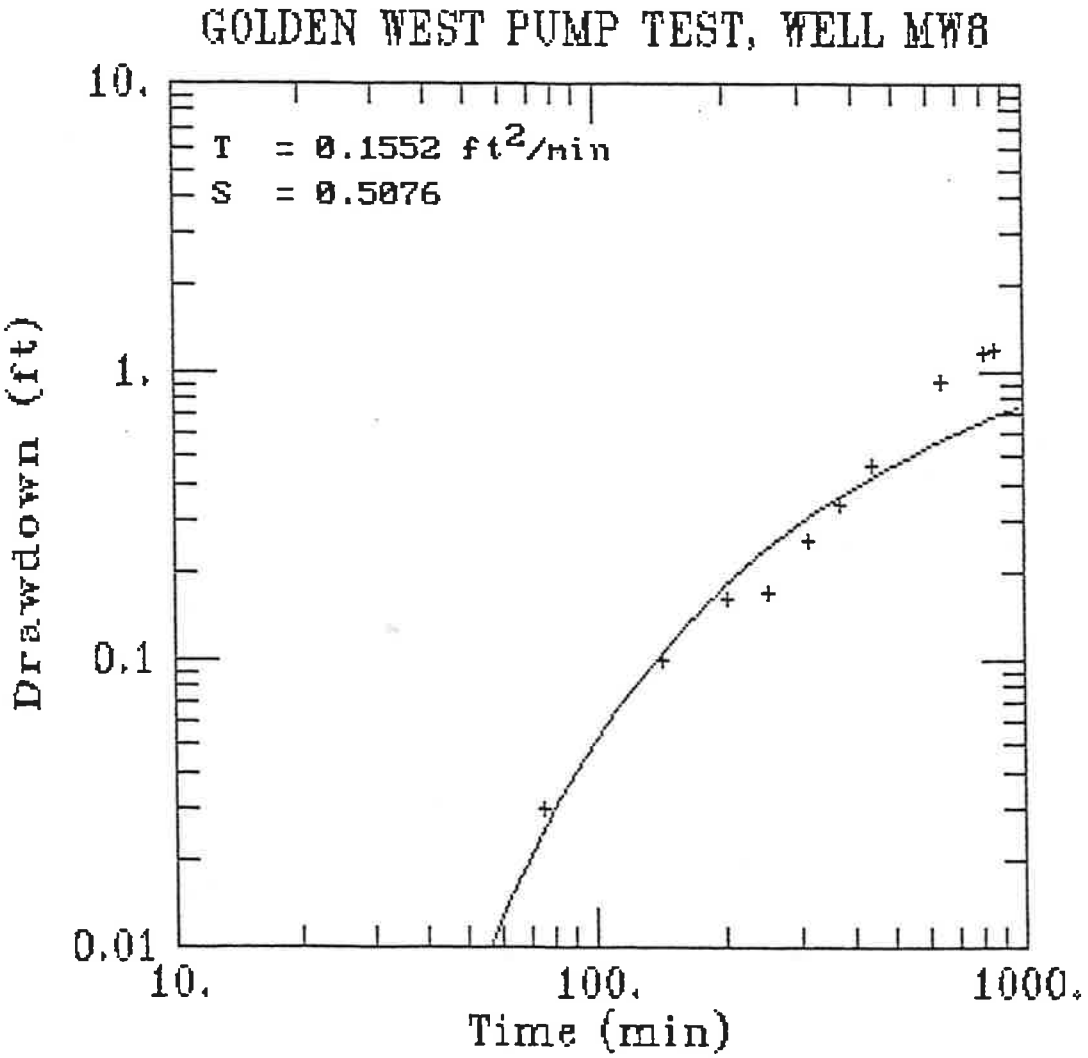


Figure C-4

Semi-log plot of groundwater recovery data for well RW2.

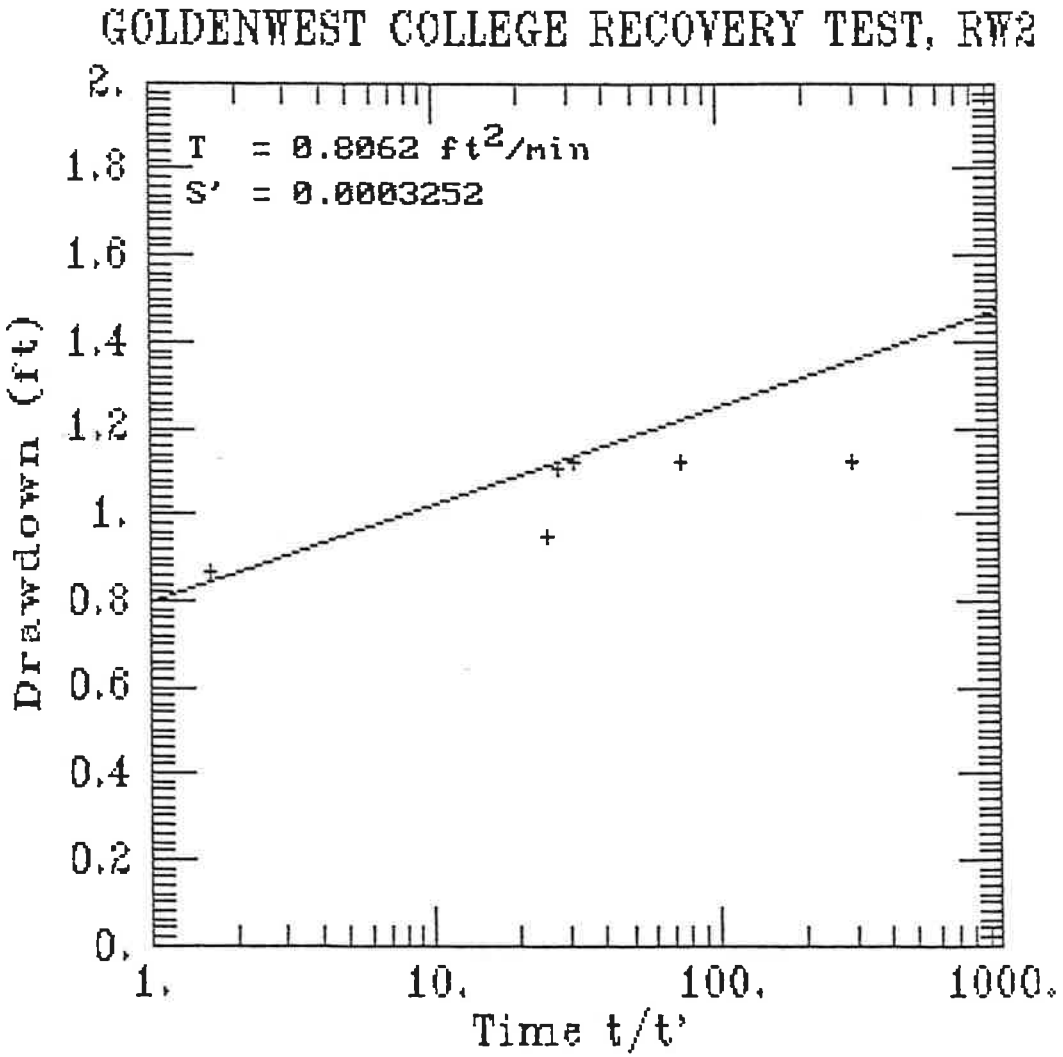
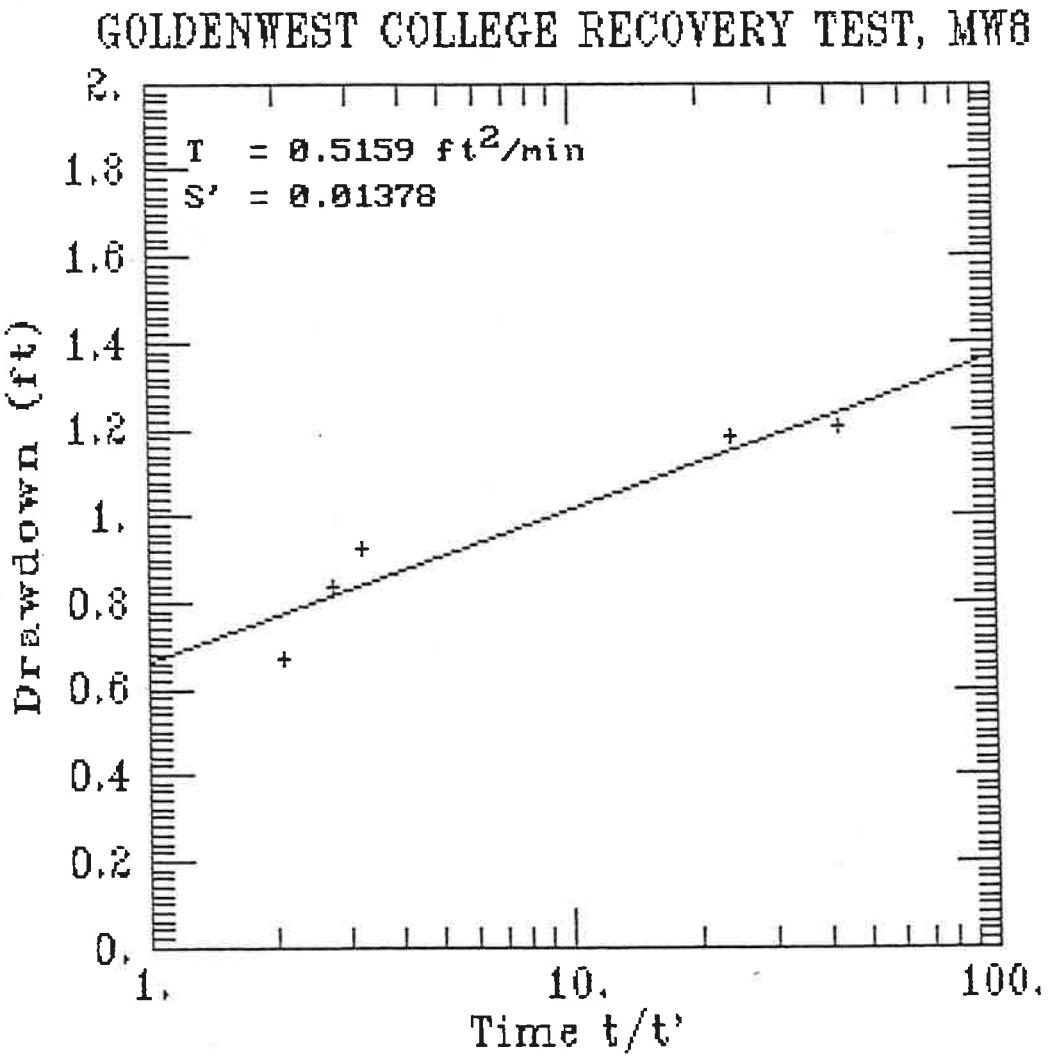


Figure C-5

Semi-log plot of groundwater recovery data for well MW8



AQUIFER TEST DATA

Owner Goldenwest Address 7112 McFadden County Orange State CA

4/08/91 Company performing test FREY Environmental Measured by JN & MA

Well No. RW1 Distance from pumping well 0 Type of test Constant Rate Aquifer Test No. 3

Measuring equipment #1 (Solinst)

Time Data
Pump on: Date 4/8/91 Time 11:00 (t)
Pump off: Date 4/09/91 Time 0137 (t')
Duration of aquifer test:
Pumping 877 (min) Recovery ____

Water Level Data
Static water level 9.53
Measuring point TOC
Elevation of measuring point ____

Discharge Data
How Q measured Flow meter/bucket
Depth of pump/air line ~ 18 feet
Previous pumping? Yes ____ No ____
Duration ____ End ____

Comments on factors affecting test data

Date	Clock time	Time since pump started t	Time since pump stopped t'	t/t'		Water level measurement	Correction or Conversion	Water level	Water level change s or s'		Discharge measurement	Rate		
4/8/91	10.08					9.53						1 gpm		
	11.00	0				9.56			.03					
	11.02	2				9.52			.0					
	11.04	4				9.52			0					
	1106	6				9.53			0					
	11.08	8				9.54			.01					
	1110	10				9.55			.02					
	11.20	20				9.59			.06					
	1130	30				9.61			.08					
	1140	40				9.65			.12					
	1150	50				9.67			.14					
	1200	60				9.69			.16					
	1220	80				9.78			.25					
	1240	100				9.81			.28			.75gpm		kink in hose
	1300	120				9.84			.31			1.0 gpm		
	1330	150				9.90			.37					
	1400	180				9.96			.43					
	1500	240				10.08			.55					
	1600	300				10.33			.80					
	1700	360				10.68			1.15					
	1800	420				11.03			1.5					
	2115	635				11.69			2.16					
4/09	2433	913				12.25			2.72					
	0119	959				12.45			2.92					
	0136	876				12.53			3.0					
	0137	877	0			12.53			3.0					Discontinue pumping
	0138	878	1	878		12.50			2.97					
	0140	880	3	293		12.45			2.92					

AQUIFER TEST DATA

Owner Goldenwest Address 7112 McFadden County Orange State CA

4/09/91 Company performing test FREY Environmental Measured by MA

Well No. RW1 Distance from pumping well _____ Type of test constant rate pumping Test No. 3

Measuring equipment _____

Time Data
Pump on: Date 4/09/91 Time 11:00 (t_0)
Pump off: Date 4/09/91 Time 1:37 (t'_0)
Duration of aquifer test:
Pumping _____ Recovery _____

Water Level Data
Static water level 9.53
Measuring point TOC
Elevation of measuring point _____

Discharge Data
How Q measured _____
Depth of pump/air line _____
Previous pumping? Yes ____ No ____
Duration _____ End _____

Comments on factors affecting test data

Date	Clock time	Time since pump started t	Time since pump stopped t'	t/t'	Water level measurement	Correction or Conversion	Water level	Water level change s or s'	Discharge measurement	Rate	
4/09	0204	964	27	33.48	12.05			2.52			
	0320	920	43	21.39	11.82			2.29			
	0740	1240	363	3.41	10.45			.92			
4/9/91	10:00	1380	503	2.74	10.45			.92			
4/9/91	14:45	1665	788	2.11	10.17			.64			
4/10/91	12:37				9.67			0.14			

AQUIFER TEST DATA

Owner Goldenwest Address 7112 McFadden County Orange State CA

4/08/91 Company performing test FREY Environmental Measured by JN & MA

Well No. RW2 Distance from pumping well _____ Type of test Constant rate pumping Test No. 3

Measuring equipment _____

Time Data
Pump on: Date 4/8/91 Time 11:00 (t)
Pump off: Date 4/9/91 Time 1:37 (t')
Duration of aquifer test:
Pumping _____ Recovery _____

Water Level Data
Static water level 10.37
Measuring point TOC
Elevation of measuring point _____

Discharge Data
How Q measured _____
Depth of pump/air line _____
Previous pumping? Yes ___ No ___
Duration [illegible] End _____

Comments on factors affecting test data

Date	Clock time	Time since pump started t	Time since pump stopped t'	t/t'		Water level measurement	Correction or Conversion	Water level	Water level change s or s'		Discharge measurement	Rate		
4/8/91	10.11					10.37						[illegible]		
	11.01	0				10.37			0					
	1103	2				10.37			0					
	1105	4				10.38			.01					
	1107	6				10.39			.02					
	1109	8				10.40			.03					
	1111	10				10.40			.03					
	1121	20				10.43			.06					
	1131	30				10.46			.09					
	1141	40				10.48			.11					
	1151	50				10.50			.13					
	1201	60				10.54			.17					
	1221	80				10.58			.21					
	1241	100				10.62			.25					
	1301	120				10.67			.30					
	1331	150				10.78			.41					
	1401	180				10.79			.42					
	1501	240				10.88			.51					
	1601	300				10.98			.61					
	1701	360				11.04			.67					
	1801	420				11.09			.72					
	2117	637				11.28			.91					
4/09	2441	821				11.45			1.08					
	0125	865				11.47			1.10					
	0140	880	3			11.49			1.12					
	0149	889	12			11.49			1.12					
	0206	906	29			11.49			1.12					
	0240	910	33			11.48			1.11					

AQUIFER TEST DATA

Owner Goldenwest Address 7112 McFadden County Orange State CA

4/09/91 Company performing test FREY Environmental Measured by Mike

Well No. RW2 Distance from pumping well _____ Type of test Constant rate pumping Test No. 3

Measuring equipment _____

Time Data
Pump on: Date 4/8/91 Time 11:00 (t_0)
Pump off: Date 4/9/91 Time 1:37 (t'_0)
Duration of aquifer test:
Pumping 877 Recovery _____

Water Level Data
Static water level 10.37
Measuring point TOC
Elevation of measuring point _____

Discharge Data
How Q measured _____
Depth of pump/air line _____
Previous pumping? Yes ____ No ____
Duration _____ End _____

Comments on factors affecting test data

Date	Clock time	Time since pump started t	Time since pump stopped t'	t/t'		Water level measurement	Correction or Conversion	Water level	Water level change s or s'		Discharge measurement	Rate		
4/9	10:00	1380	503			11.24			0.87					
4/10	12:39					10.55			0.18					

AQUIFER TEST DATA

Owner Goldenwest Address 7112 McFadden County Orange State CA

Date 4/08/91 Company performing test FREY Environmental Measured by Mike

Well No. MW1 Distance from pumping well _____ Type of test constant rate pumping Test No. 3

Measuring equipment Solinist #1

Time Data
Pump on: Date 4/8/91 Time 11:00 (t_0)
Pump off: Date 4/9/91 Time 1:37 (t'_0)
Duration of aquifer test:
Pumping _____ Recovery _____

Water Level Data
Static water level 10.87
Measuring point TOC
Elevation of measuring point _____

Discharge Data
How Q measured _____
Depth of pump/air line _____
Previous pumping? Yes ____ No ____
Duration _____ End _____

Comments on factors affecting test data

Date	Clock time	Time since pump started t	Time since pump stopped t'	t/t'		Water level measurement	Correction or Conversion	Water level	Water level change s or s'		Discharge measurement	Rate		Depth to product (+1.88)	Change in prod level Δp
4/08	10.39					10.87									
	1211	71				10.96			+.01					10.20	
	1520	140				10.86			+.01					10.19	+.01
	1920	200				10.87			0					10.09	+.11
	15:10	250				10.82			+.05					10.16	+.04
	1611	311				10.81			+.06					10.15	+.05
	1713	373				10.78			+.09					10.14	+.06
	1816	436				10.78			+.09					10.23	+.07
	2125	655				10.84			+.03					10.15	+.06
4/09	1454	834				10.90			.03					10.16	+.04
	0131	871				10.92			.05					10.17	+.03
	0212	912	35			10.91			.04					10.21	-.01
	6751	1251	374			10.96			.09					10.19	+.01
	1200	1500	623			10.96			.09					10.26	-.06
	1400	1660	783			10.89			.02					10.25	-.05
4/10/91	1257					10.74			-0.13					10.21	-.01
														9.82	+0.10

AQUIFER TEST DATA

Owner Goldenwest Address 7112 McFadden County Orange State CA

Date 4/08/91 Company performing test FREY Environmental Measured by JN + MA

Well No. MW2 Distance from pumping well _____ Type of test constant rate pumping Test No. 3

Measuring equipment #1

Time Data
Pump on: Date 4/8/91 Time 11:00 (t_0)
Pump off: Date 4/9/91 Time 1:37 (t'_0)
Duration of aquifer test:
Pumping _____ Recovery _____

Water Level Data
Static water level 10.16
Measuring point TOC
Elevation of measuring point _____

Discharge Data
How Q measured _____
Depth of pump/air line _____
Previous pumping? Yes ____ No ____
Duration _____ End _____

Comments on factors affecting test data

Date	Clock time	Time since pump started t	Time since pump stopped t'	t/t'		Water level measurement	Correction or Conversion	Water level	Water level change s or s'		Discharge measurement	Rate		
4/8/91	10:22					10.16			0					
	1346	166				10.16								
	1439	214				10.15			-0.01					
	1526	266				10.14								
	1621	321				10.13								
	1722	382				10.12								
	1821	441				10.13			-0.03					
	2131	631				10.16								
4/09	2456	802				10.17								
	0130	876				10.17			0.01					
	0200	900	23			10.17								
	0759	1259	382			10.19			-.03					
	1000	1380	503			10.19			.03					
	1400	1660	783			10.14			-0.02					
4/10	1301					10.04			-0.12					

AQUIFER TEST DATA

Owner Goldenwest Address 7112 McFadden County Orange State CA

Date 4/08/91 Company performing test FREY Environmental Measured by Mike

Well No. MW3 Distance from pumping well _____ Type of test Constant late pumping Test No. 3

Measuring equipment #1

Time Data
Pump on: Date 4/08/91 Time 11:00 (t_0)
Pump off: Date 4/09/91 Time 1:37 (t_0)
Duration of aquifer test:
Pumping _____ Recovery _____

Water Level Data
Static water level 12.15
Measuring point TOC
Elevation of measuring point _____

Discharge Data
How Q measured _____
Depth of pump/air line _____
Previous pumping? Yes ____ No ____
Duration _____ End _____

Comments on factors affecting test data

Date	Clock time	Time since pump started t	Time since pump stopped t'	t/t'		Water level measurement	Correction or Conversion	Water level	Water level change s or s'		Discharge measurement	Rate		TOproduct From TOC +.84
4/8/91	1035					12.15								9.80
	1208	68				12.17			.02					9.81
	1310	130				12.21			.06					9.84
	1415	395				12.28			.13					9.88
	1508	248				12.29			.14					9.91
	1608	308				12.34			.19					9.93
	1709	369				12.38			.23					9.99
	1810	430				12.47			.32					10.05
	2134	634				12.69			.52					10.19
4/09	2439	819				12.84			.69					10.28
	0142	862				12.87			.72					10.65
	0157	897	20			12.87			.72					10.38
	0208	908	31			12.87			.72					10.38
	0746	1246	369			12.90			.75					10.29
	1000	1380	503			12.87			.72					10.28
	1400	1660	783			12.72			.62					10.22
4/10	1253					12.47			0.32					9.43

AQUIFER TEST DATA

Owner Goldenwest Address 7112 McFadden County Orange State CA

Date 4/08/91 Company performing test FREY Environmental Measured by Mike

Well No. MW4 Distance from pumping well _____ Type of test constant rate pumping Test No. 3

Measuring equipment #1

Time Data
Pump on: Date 4/8/91 Time 11:00 (t_0)
Pump off: Date 4/9/91 Time 1:37 (t'_0)
Duration of aquifer test:
Pumping _____ Recovery _____

Water Level Data
Static water level 10.27
Measuring point TOC
Elevation of measuring point _____

Discharge Data
How Q measured _____
Depth of pump/air line _____
Previous pumping? Yes ___ No ___
Duration _____ End _____

Comments on factors affecting test data

Date	Clock time	Time since pump started t	Time since pump stopped t'	t/t'		Water level measurement	Correction or Conversion	Water level	Water level change s or s'		Discharge measurement	Rate		
4/8/91	1012					10.27								
	1335	155				10.24			-0.03					
	1426	206				10.28			0.01					
	1516	256				10.25								
	1614	314				10.25			-0.02					
	1704	364				10.27			0					
	1809	424				10.29			0.02					
	2138	638				10.38			0.11					
4/09	2446	826				10.42			0.15					
	0127	867				10.43			0.16					
	0150	890	13			10.43			0.16					
	0209	904	27			10.43			0.16					
	0816	1270	393			10.46			0.19					
	1000	1380	503			10.47			0.20					
	1400	1660	783			10.40			0.13					
4/10	12:41					10.22			-0.05					

AQUIFER TEST DATA

Owner Goldenwest Address 7112 McFadden County Orange State CA

Date 4/08/91 Company performing test FREY Environmental Measured by Mike

Well No. MW5 Distance from pumping well _____ Type of test constant rate pumping Test No. 3

Measuring equipment #1

Time Data
Pump on: Date 4/8/91 Time 11:00 (t_0)
Pump off: Date 4/9/91 Time 1:37 (t'_0)
Duration of aquifer test:
Pumping _____ Recovery _____

Water Level Data
Static water level 10.21
Measuring point TOC
Elevation of measuring point _____

Discharge Data
How Q measured _____
Depth of pump/air line _____
Previous pumping? Yes ____ No ____
Duration _____ End _____

Comments on factors affecting test data

Date	Clock time	Time since pump started t	Time since pump stopped t'	t/t'		Water level measurement	Correction or Conversion	Water level	Water level change s or s'		Discharge measurement	Rate		
4/8/91	1019					10.21								
	1337	157				10.20								
	1429	208				10.19								
	1518	258				10.19								
	1615	315				10.18								
	1706	366				10.17								
	1808	428				10.18								
	2140	640				10.26								
4/09	2448	828				10.31								
	0028	868				10.31			0.10					
	0152	892	15			10.33								
	0202	902	25			10.33			0.12					
	0308	1268	391			10.37			0.16					
	1000	1380	563			10.39			0.18					
	1400	1660	783			10.33			0.12					
						10.19			-0.02					

AQUIFER TEST DATA

Owner Goldenwest Address 7112 McFadden County Orange State CA

Date 4/08/91 Company performing test FREY Environmental Measured by Mike

Well No. MW6 Distance from pumping well _____ Type of test constant rate pumping Test No. 3

Measuring equipment #1

Time Data
Pump on: Date 4/8/91 Time 11:00 (t_0)
Pump off: Date 4/9/91 Time 1:37 (t'_0)
Duration of aquifer test:
Pumping _____ Recovery _____

Water Level Data
Static water level 9.74
Measuring point TOC
Elevation of measuring point _____

Discharge Data
How Q measured _____
Depth of pump/air line _____
Previous pumping? Yes ___ No ___
Duration _____ End _____

Comments on factors affecting test data

Date	Clock time	Time since pump started t	Time since pump stopped t'	t/t'	Water level measurement	Correction or Conversion	Water level	Water level change s or s'	Discharge measurement	Rate
4/08	10:25				9.74			0		
	1349	169			9.72			-0.02		
	1432	212			9.72					
	1523	263			9.71			-0.03		
	1618	318			9.70					
	1720	380			9.70					
	1819	439			9.70			-0.04		
	2214	674			9.73			-0.01		
4/09	0106	786			9.75					
	0138	878	1		9.75					
	0208	908	31		9.75					
	0755	1255	378		9.75			0.01		
	1000	1380	503		9.76			0.02		
	1945	1665	788		9.72			-0.02		
4/10	12:59				9.62			-0.12		

AQUIFER TEST DATA

Owner Goldenwest Address 7112 McFadden County Orange State CA

Date 4/08/91 Company performing test FREY Environmental Measured by Mike

Well No. MW7 Distance from pumping well _____ Type of test Constant rate pumping Test No. 3

Measuring equipment #1

Time Data
Pump on: Date 4/8/91 Time 11:00 (t_0)
Pump off: Date 4/9/91 Time 1:37 (t'_0)
Duration of aquifer test:
Pumping _____ Recovery _____

Water Level Data
Static water level 10.10
Measuring point TOC
Elevation of measuring point _____

Discharge Data
How Q measured _____
Depth of pump/air line _____
Previous pumping? Yes ____ No ____
Duration _____ End _____

Comments on factors affecting test data

Date	Clock time	Time since pump started t	Time since pump stopped t'	t/t'		Water level measurement	Correction or Conversion	Water level	Water level change s or s'		Discharge measurement	Rate		
4/8/91	10:27					10.10								
	1339	159				10.09								
	1430	210				10.12								
	1521	261				10.08								
	1617	317				10.07								
	1718	378				10.06								
	1813	433				10.07								
	2143	643				10.12			0.02					
4/09	2450	830				10.18								
	0130	870				10.20			0.10					
	0153	893	16			10.18			0.08					
	0210	910	33			10.17			0.07					
	0305	1265	388			10.27			0.17					
	10:00	1380	503			10.30			0.20					
	1005	1665	788			10.28			0.18					
4/10	12:46					10.09			0					

AQUIFER TEST DATA

Owner Goldenwest Address 7112 McFadden County Orange State CA

Date 4/08/91 Company performing test FREY Environmental Measured by Mike

Well No. MW8 Distance from pumping well _____ Type of test constant rate pumping Test No. 3

Measuring equipment #1

Time Data
Pump on: Date 4/8/91 Time 11:00 (t_0)
Pump off: Date 4/9/91 Time 1:37 (t'_0)
Duration of aquifer test:
Pumping _____ Recovery _____

Water Level Data
Static water level 12.67
Measuring point TOC
Elevation of measuring point _____

Discharge Data
How Q measured _____
Depth of pump/air line _____
Previous pumping? Yes ____ No ____
Duration _____ End _____

Comments on factors affecting test data

Date	Clock time	Time since pump started t	Time since pump stopped t'	t/t'		Water level measurement	Correction or Conversion	Water level	Water level change s or s'		Discharge measurement	Rate		TOproduct From TOC +0.28 WNB3
4/8/91	1031					12.67								10.10
	1215	75				12.70			.03					10.11
	1329	144				12.77			.10					10.14
	1429	204				12.83			.16					10.17
	1513	253				12.84			.17					10.20
	1613	313				12.93			.26					10.25
	1715	375				13.01			.34					10.25
	1826	446				13.14			.47					10.45
	2146	646				13.60			.93					10.79
4/9	0235	815				13.83			1.16					10.89
	0321	863				13.86			1.19					10.94
	0356	898	21			13.87			1.2					10.98
	0215	915	38			13.85			1.18					
	0813	1273	396			13.60			.93					10.91
	1000	1382	503			13.51			.84					10.83
	1145	1665	788			13.34			.67					10.67
4/10	1307					12.89			0.22					9.95

AQUIFER TEST DATA

Owner Goldenwest Address 7112 McFadden County Orange State CA

Date 4/08/91 Company performing test FREY Environmental Measured by Mike

Well No. MW9 Distance from pumping well _____ Type of test Constant rate pumping Test No. 3

Measuring equipment # 1

Time Data
Pump on: Date 4/8/91 Time 11:00 (t_0)
Pump off: Date 4/9/91 Time 1:37 (t'_0)
Duration of aquifer test:
Pumping _____ Recovery _____

Water Level Data
Static water level 9.34
Measuring point TOC
Elevation of measuring point _____

Discharge Data
How Q measured _____
Depth of pump/air line _____
Previous pumping? Yes ____ No ____
Duration _____ End _____

Comments on factors affecting test data

Date	Clock time	Time since pump started t	Time since pump stopped t'	t/t'		Water level measurement	Correction or Conversion	Water level	Water level change s or s'		Discharge measurement	Rate		
4/8/91	1020					9.34								
	1349	164				9.32			-0.02					
	1436	216				9.31								
	1528	268				9.29			-0.05					
	1623	323				9.28								
	1725	385				9.29								
	1823	443				9.29								
	2156	656				9.35			0.01					
4/09	2458	838				9.35								
	0134	874				9.35								
	0218	918	41			9.35								
	802	1262	385			9.38			0.04					
	1000	1380	503			9.38								
	1945	1665	788			9.31			-0.03					
4/10	1303					9.24			-0.10					

AQUIFER TEST DATA

Owner Goldenwest Address 7112 McFadden County Orange State CA

Date 4/08/91 Company performing test FREY Environmental Measured by Mike

Well No. MW 10 Distance from pumping well _____ Type of test constant rate pumping Test No. 3

Measuring equipment #1

Time Data
Pump on: Date 4/8/91 Time 11:00 (t_0)
Pump off: Date 4/9/91 Time 1:37 (t'_0)
Duration of aquifer test:
Pumping _____ Recovery _____

Water Level Data
Static water level 11.22
Measuring point TOC
Elevation of measuring point _____

Discharge Data
How Q measured _____
Depth of pump/air line _____
Previous pumping? Yes ____ No ____
Duration _____ End _____

Comments on factors affecting test data

Date	Clock time	Time since pump started t	Time since pump stopped t'	t/t'		Water level measurement	Correction or Conversion	Water level	Water level change s or s'		Discharge measurement	Rate		
4/8/91	10.17					11.22			0					
	1341	161				11.23								
	1439	219				11.23			0.01					
	1531	271				11.22			0					
	1625	325				11.21								
	1728	388				11.21			-0.01					
	1829	449				11.22			0					
	2150	650				11.29			0.07					
4/09	0044	824				11.30								
	0130	870				11.30			0.08					
	0213	913	36			11.29			0.07					
	0819	1279	402			11.36			0.14					
	1000	1380	503			11.42			0.20					
	1995	1665	788			11.35			0.13					
4/10	1010					11.18			-0.04					

Copy No. 1

2 SEPTEMBER 1988

SITE ASSESSMENT REPORT AND WORK PLAN TO INVESTIGATE THE OCCURRENCE OF GASOLINE IN GROUNDWATER GOLDEN WEST COLLEGE MAINTENANCE YARD HUNTINGTON BEACH, CALIFORNIA

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Project No. A881263

SITE ASSESSMENT REPORT AND WORK PLAN TO INVESTIGATE THE OCCURRENCE OF GASOLINE IN GROUNDWATER GOLDEN WEST COLLEGE MAINTENANCE YARD HUNTINGTON BEACH, CALIFORNIA

1.0 INTRODUCTION

This report presents the results of an initial investigation into the occurrence of petroleum hydrocarbons in the soil and groundwater adjacent to a recently removed underground gasoline storage tank; this report also presents a work plan for additional assessment. Three groundwater monitoring wells were installed in borings drilled to depths of 20 to 25 feet below the ground surface in the vicinity of an excavation at a former underground gasoline storage tank at the Golden West College Maintenance Yard located at 15744 Golden West Street in Huntington Beach, California (Figures 1 and 2). The work was performed on 24 and 25 May 1988 and was based on observations made during site visits conducted on 9 and 11 March 1988, and a review of available geologic and hydrogeologic data in the area. The work was conducted in general accordance with the work plan entitled "Work Plan For Site Assessment, Leaky Underground Storage Tank, Golden West College Maintenance Yard, Huntington Beach, California", dated 29 April 1988 and approved by the Orange County Health Care Agency (HCA).

2.0 OBJECTIVE

The objective of this report is to briefly present the findings of the initial phase of the investigation and to propose additional investigation designed to further assess the extent of the gasoline plume.

3.0 FIELD INVESTIGATION

The subsurface conditions were investigated by drilling three borings and installing a monitoring well in each boring. The borings were drilled by Westech, using 12-inch hollow stem augers. Soil samples were obtained at approximately 5-foot depth intervals. Wells are 4-inch diameter flush-threaded PVC. The slotted section is machine slotted with slot sizes of 0.02 inches. The boring logs describing the subsurface conditions in each boring and showing well completion information are presented in Appendix A. A generalized description of the subsurface conditions interpreted from the borings is shown in Figure 3.

4.0 SITE CONDITIONS

Subsurface Soils

Borings MW-1 and MW-3 encountered a fine-grained yellow sand (fill) unit below the asphalt that extended to a depth of approximately 2.5 to 3 feet below the ground surface. An olive-

gray silt unit, approximately 5.5 feet thick, was observed to underlie the sand (fill) and extended to a depth of approximately 8 to 8.5 feet below the ground surface. An approximately 3-foot-thick fine-grained sand unit, similar to the surface sand (fill) was observed to lie below the silt and extend to a depth of 10.5 to 11 feet below the ground surface. The top of the groundwater surface was observed to occur within this sand, beneath which was observed an organic clay with local thin layers of silt and sandy-clayey silt to the total depth of the two borings. The groundwater observed in the sand between a depth of about eight to 11 feet, may be perched on the underlying low permeability clay, which retards migration of surface water to potential deeper water-bearing units.

Boring MW-2 encountered the silt layer from the surface to a depth of approximately 9 feet below the ground surface. The fine-grained sand in which the groundwater surface was observed, in MW-1 and MW-3, was found to extend from approximately 9 to 14.5 feet below the ground surface. Beneath the sand a sandy silt, approximately 5 feet thick, was observed to overlay the organic clay which extended to the total depth of the boring.

Petroleum odor was noted from soil collected in borings MW-1 and MW-3. The odor was noticed in the boring located closest to the tank excavation, MW-1, at a depth of approximately 2.5 to 3 feet below the ground surface; the odor extended to where groundwater was encountered, at approximately 9 feet below the ground surface. The odor was not noticed in boring MW-3 shallower than a depth of approximately 8 feet below the ground surface. Boring MW-3 is located approximately 80 feet west of boring MW-1. There was no petroleum odor noted from boring MW-2, which was located approximately 80 feet north of boring MW-1.

Groundwater

The depth to groundwater at the site is approximately nine feet below the ground surface, an elevation of approximately 15 feet Mean Sea Level (MSL). The groundwater monitoring well locations and elevations were surveyed in the field by Norris Repke Inc. of Tustin, licensed surveyors. The groundwater gradient is shallow and the direction is judged to be to the west (Figure 4).

A thin film of petroleum product was reported to be present on the surface of the water in the wells completed in borings MW-1 and MW-3 at the time of the installation. Subsequent monitoring of the wells found significant thickness of free product. No petroleum product was observed on the groundwater surface in the well installed in boring MW-2 during well installation.

5.0 CHEMICAL ANALYTICAL RESULTS

Soil

The soil chemical analyses (laboratory analyses) were performed by West Coast Analytical Service Inc. (WCAS) of Santa Fe Springs, California, a State-certified and Environmental Protection Agency (EPA) contract laboratory. Soil samples analyzed were selected on the basis of field organic vapor meter (OVM) readings and field observations. The analytical program included the analysis of selected soil samples for total petroleum hydrocarbons (TPH) and benzene, toluene, ethylbenzene, and xylenes (BTXE) in general accordance with California modified EPA Method No. 8015 and EPA Method No. 8020, respectively. Two soil samples per boring were selected for each analysis. The laboratory reports are provided in Appendix B.

Petroleum hydrocarbons are present in the soil from the three borings as shown in Table 1. The petroleum hydrocarbons are at significantly higher concentrations in the soil in boring MW1 than in MW2 and MW3. BTXE were detected in the soil of borings MW2 and MW3.

Groundwater

Groundwater samples were collected approximately one day following installation and development of the wells. One groundwater sample from each well was collected and analyzed for TPH and BTXE in general accordance with California modified EPA Method No. 8015 and EPA Method No. 8020, respectively. Laboratory analytical reports and chain of custody forms are presented in Appendix B. Groundwater samples from MW1 and MW3 contained significant concentrations of gasoline, as shown in Table 1. Gasoline was not detected in Well MW2 at a detection limit of 10 parts per billion (ppb); however, BTXE were detected in the groundwater samples at concentrations of 1.3, 1.9, 0.74, and 3.4 ppb respectively.

Gasoline was observed to be floating above the surface of the groundwater, as measured in the groundwater monitoring wells on 3 June 1988, approximately nine days following well development and sample collection. The gasoline was measured to be approximately 1.8 feet and 0.5 feet thick in wells MW1 and MW3, respectively (Figure 5).

Tank excavation to the West

In addition to the observations made as a part of this investigation, petroleum hydrocarbons were observed in the saturated zone of another tank excavation to the southwest of the previously removed tank. The petroleum hydrocarbons were observed during the excavation of a 1,000-gallon tank 3 June 1988 (Figure 2).

6.0 CONCLUSIONS

Significant concentrations of gasoline were encountered floating on the groundwater in monitoring wells MW1 and MW3, and the groundwater in these wells had high levels of TPH and BTXE. Groundwater in MW2 had no TPH at the detection level, and a trace of BTXE.

Soil in MW1 near the top of groundwater had a significant concentration of TPH. Measurable TPH was not detected in the other five samples. BTXE was found in all the soil samples. The level of BTXE was generally higher in MW1 and MW3 than in MW2 where the maximum concentration of BTXE was benzene at 25 ppb.

The groundwater gradient as judged in these three monitoring wells is to the west at a relatively flat gradient of approximately four feet per 1,000 feet.

The free product phase and soil containing petroleum hydrocarbons extend beyond the limits of the three monitoring well locations. Additional exploration is needed to assess the extent of free product migration and soil containing hydrocarbons. In addition the underground gasoline tank excavation to the southwest of MW-3 encountered hydrocarbons. Additional borings and monitoring wells are needed to explore that area.

7.0 PLAN FOR PHASE 2 INVESTIGATION

Based on the findings of the initial phase of the investigation, our planned approach to meet the objective will include conducting a groundwater screening survey and installing three additional groundwater monitoring wells. The groundwater screening survey is proposed to provide information useful for the delineation the petroleum hydrocarbon plume. Plume delineation will be useful for the purpose of establishing final groundwater monitoring well locations in the upgradient direction to the east, near the buildings to the north and south of the gasoline plume as presently estimated, and to the west. Tentative locations of the three monitoring wells are shown in Figure 6 as MW4, MW5, and MW6.

The groundwater screening survey will be conducted by advancing an approximately 1.8 inch outside diameter (O.D.) cone penetrometer (CPT) cone with rod to a depth of approximately 13 feet below the ground surface or four feet below the groundwater table. The CPT will be retracted from the hole, the water level measured, and a sample of the groundwater will be collected with a bailer. If the hole should collapse, a 1.75 inch O.D. well point will be driven and a water sample collected from inside the well point using a bailer. The well point will consist of three feet of wire-wrapped screen at the base immediately above the tip. The screen will be driven so that approximately one foot of the screen will be above the water table. Subsequent to groundwater sample collection, the well point will be withdrawn. The CPT rod and tip and the well points will be steam cleaned

between each advancement of the devices into the subsurface. If free product is not encountered, water samples will be analyzed using a Hanby Analytical Laboratories Field Test Kit for Aromatics. The results will be recorded. The holes will be backfilled with a cement-bentonite grout.

Where free product is not encountered in the well, an attempt will be made to monitor subsurface vapors prior to abandoning the hole. For this purpose a wood plug would be placed in the hole and the gas allowed to equilibrate for one to two hours. A hole would then be drilled in the plug and small-diameter tubing inserted to a depth of three to four feet. A Foxboro OVA flame ionization detector would then be used to sample the vapors.

The procedures used for soil sampling, well installation and development, groundwater sampling, sample handling, and soil and groundwater analyses will be in general accordance with those outlined in our previous work plan dated 29 April 1988. Based on the results of the planned second phase of the investigation, recommendations will be made regarding conceptual mitigation measures and/or additional investigations judged to be appropriate.

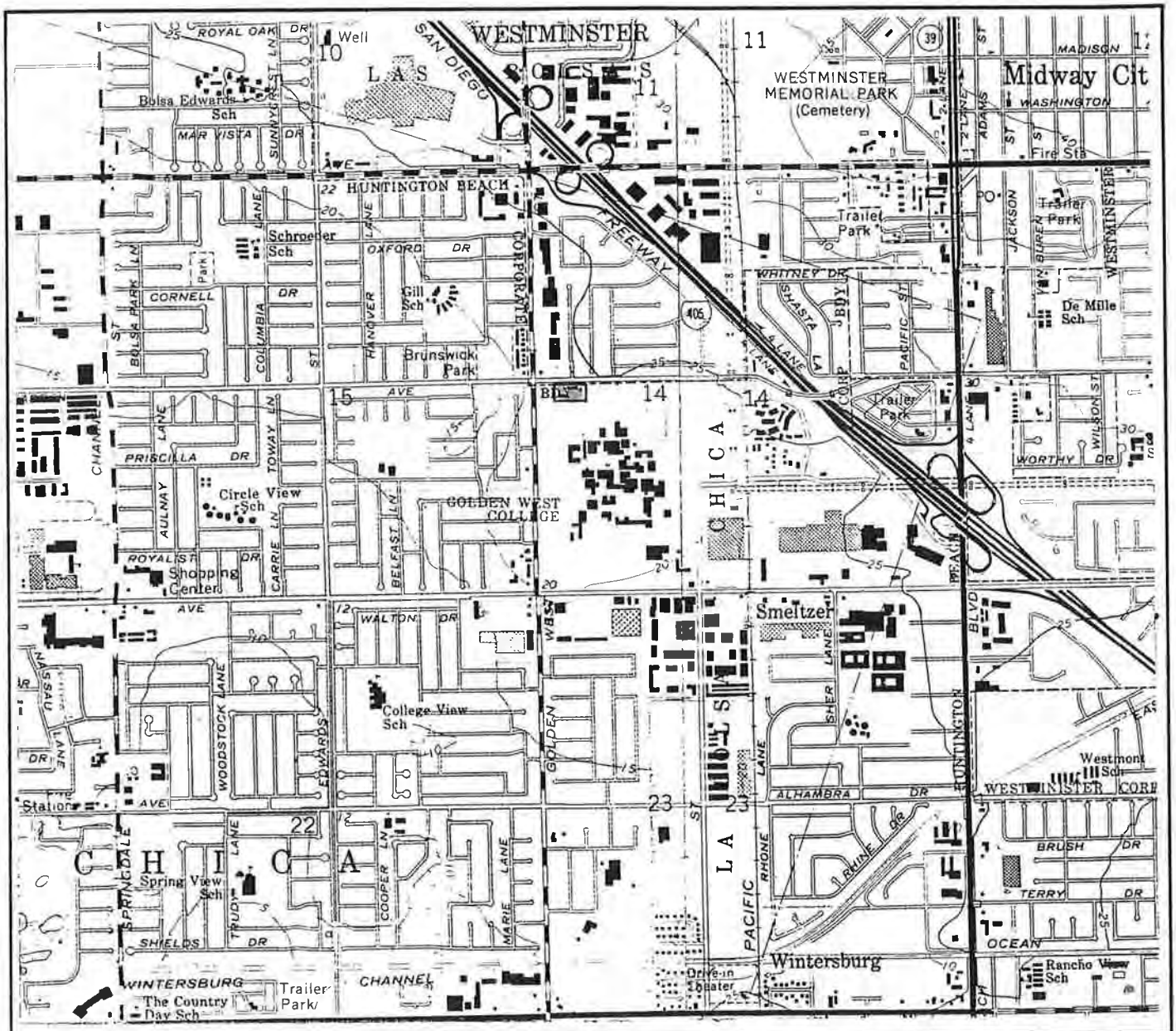
8.0 SCHEDULE

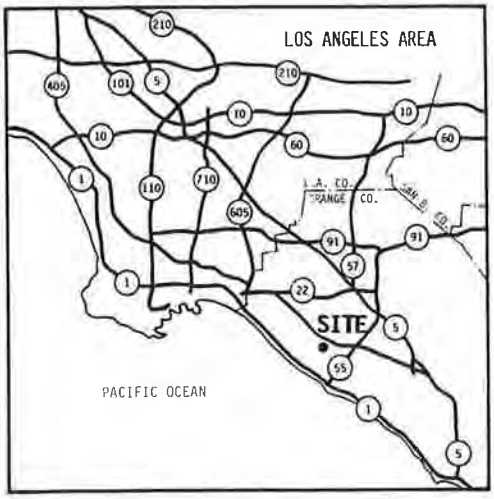
The estimated schedule to complete the scope of work, following receipt of written authorization to proceed and a fully-executed contract, and agency approval of the work plan is anticipated to be approximately four to nine weeks, depending on the findings. Mobilization for field work will require one to two weeks, depending on availability of drilling subcontractors. The groundwater sampling survey will take one to two days. Groundwater monitoring well installation will take two days and laboratory analyses will very likely be available within two weeks of submittal of samples to the laboratory. Analysis and a written report will require two to three weeks.

TABLE 1

CHEMICAL ANALYTICAL RESULTS

SAMPLE TYPE	BORING	SAMPLE NUMBER	DEPTH ft	TPH ppm	BENZENE ppm	TOLUENE ppm	XYLENE ppm	ETHYL BENZENE ppm
Soil	MW1	MW1-1-3	5	ND	0.0055	0.012	0.083	0.0057
		MW1-2-3	10	508	0.0094	0.110	0.220	0.041
	MW2	MW2-1	5	ND	0.0048	0.0042	0.0024	ND
		MW2-3-1	12	ND	0.025	0.0089	0.012	0.0018
	MW3	MW3-1-2	5	ND	0.025	0.042	0.160	0.019
		MW3-2-2	10	ND	0.0023	0.003	0.0035	ND
Water	MW1			180	2.900	11.000	31.000	5.300
	MW2			ND	0.0013	0.0019	0.0034	0.0007
	MW3			83	15.000	18.000	14.000	2.900





NOTE:
BASE MAP IS TAKEN FROM USGS SEAL BEACH AND NEWPORT BEACH QUADRANGLES, CALIFORNIA-ORANGE CO., 7.5 MINUTE SERIES (TOPOGRAPHIC), 1965, PHOTOREVISED 1981

EXPLANATION

SITE

NORTH

0 ½ 1

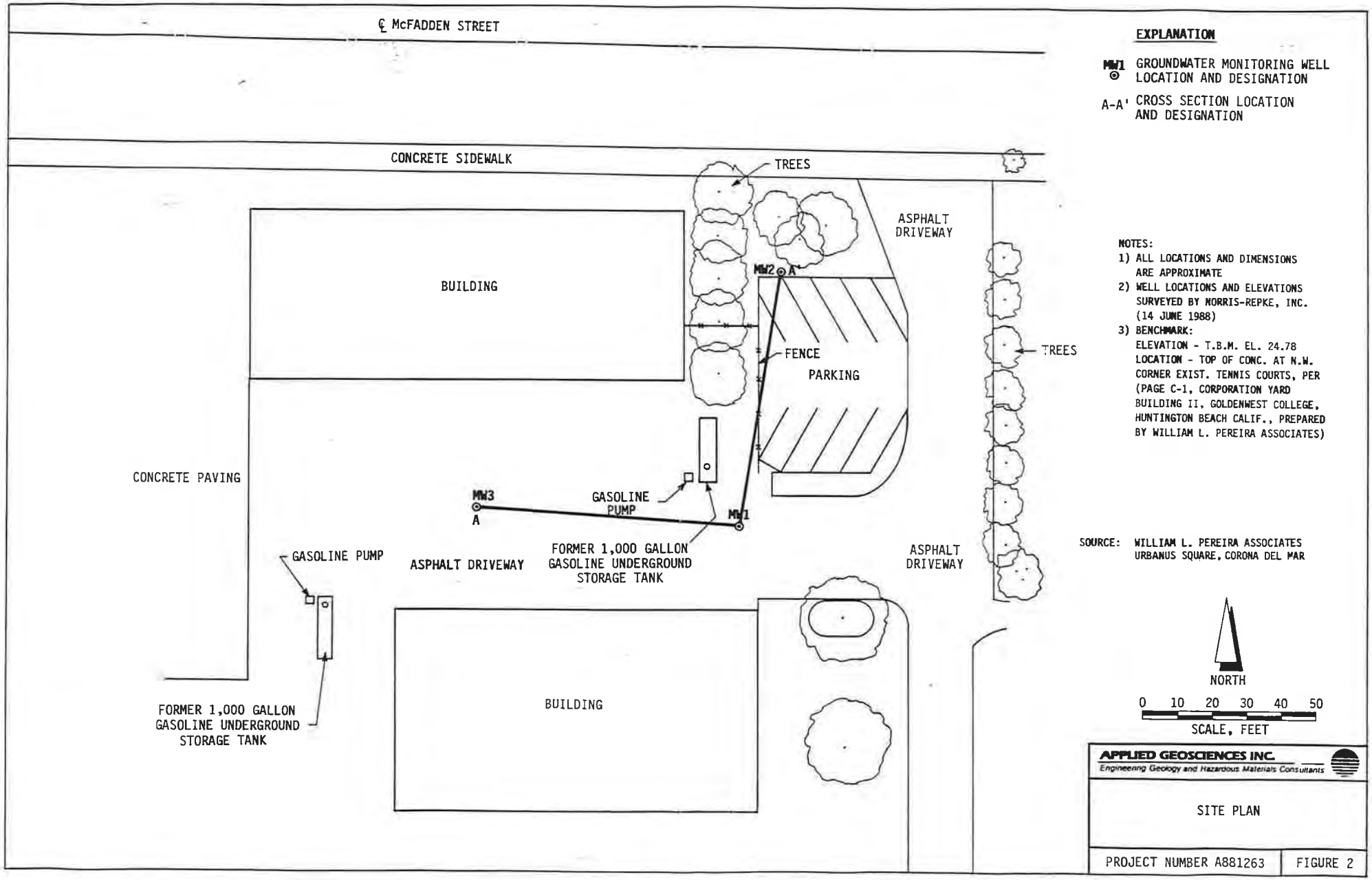
SCALE, MILES

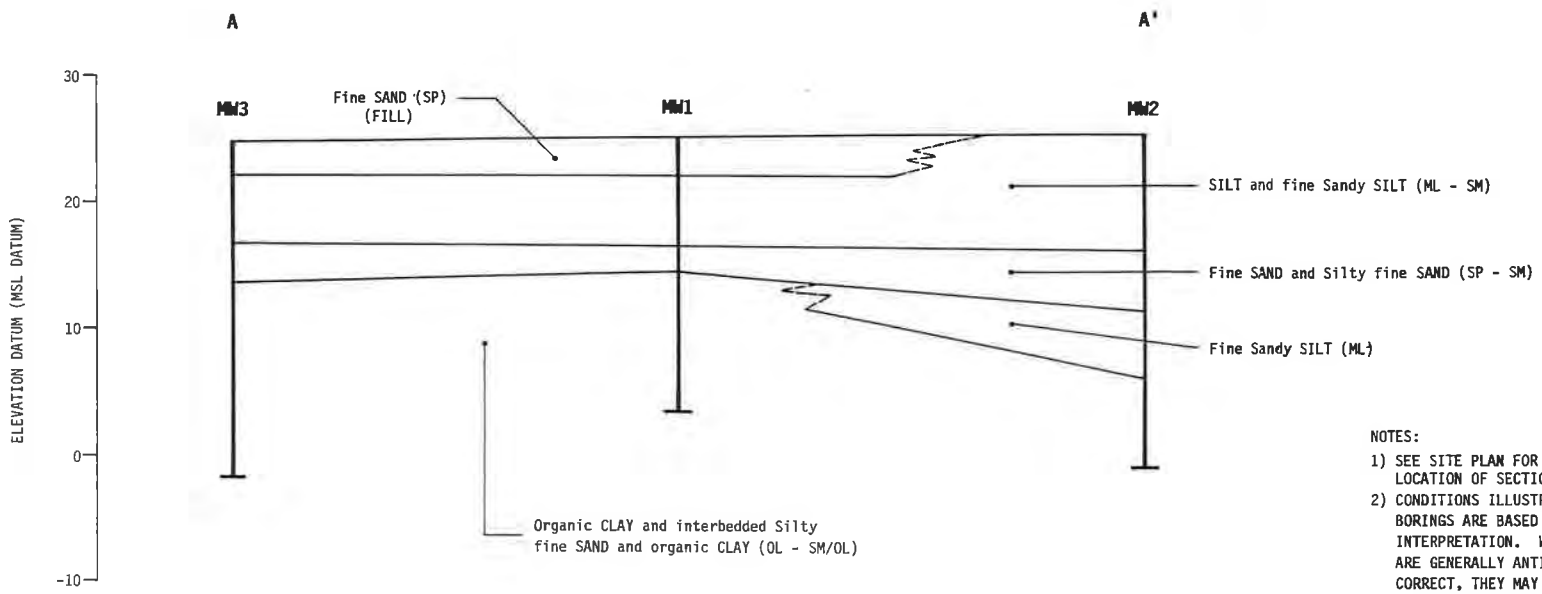
APPLIED GEOSCIENCES INC.

Engineering Geology and Hazardous Materials Consultants

SITE VICINITY MAP

PROJECT NUMBER A881263 | FIGURE 1


℄ McFADDEN STREET
CONCRETE SIDEWALK
TREES
ASPHALT DRIVEWAY
BUILDING
MW2
A
A'
FENCE
PARKING
TREES
CONCRETE PAVING
MW3
A
GASOLINE PUMP
MW1
GASOLINE PUMP
ASPHALT DRIVEWAY
FORMER 1,000 GALLON GASOLINE UNDERGROUND STORAGE TANK
ASPHALT DRIVEWAY
FORMER 1,000 GALLON GASOLINE UNDERGROUND STORAGE TANK
BUILDING
EXPLANATION
MW1 GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
A-A' CROSS SECTION LOCATION AND DESIGNATION
NOTES:
1) ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE
2) WELL LOCATIONS AND ELEVATIONS SURVEYED BY NORRIS-REPKE, INC. (14 JUNE 1988)
3) BENCHMARK:
ELEVATION - T.B.M. EL. 24.78
LOCATION - TOP OF CONC. AT N.W. CORNER EXIST. TENNIS COURTS, PER (PAGE C-1, CORPORATION YARD BUILDING II, GOLDENWEST COLLEGE, HUNTINGTON BEACH CALIF., PREPARED BY WILLIAM L. PEREIRA ASSOCIATES)
SOURCE: WILLIAM L. PEREIRA ASSOCIATES URBANUS SQUARE, CORONA DEL MAR
NORTH
0 10 20 30 40 50
SCALE, FEET
APPLIED GEOSCIENCES INC.
Engineering Geology and Hazardous Materials Consultants
SITE PLAN
PROJECT NUMBER A881263
FIGURE 2



NOTES:

1) SEE SITE PLAN FOR LOCATION OF SECTION
2) CONDITIONS ILLUSTRATED BETWEEN BORINGS ARE BASED ON GEOLOGIC INTERPRETATION. WHILE THESE ARE GENERALLY ANTICIPATED TO BE CORRECT, THEY MAY VARY LOCALLY FROM THOSE INDICATED
3) VERTICAL EXAGGERATION OF 2:1

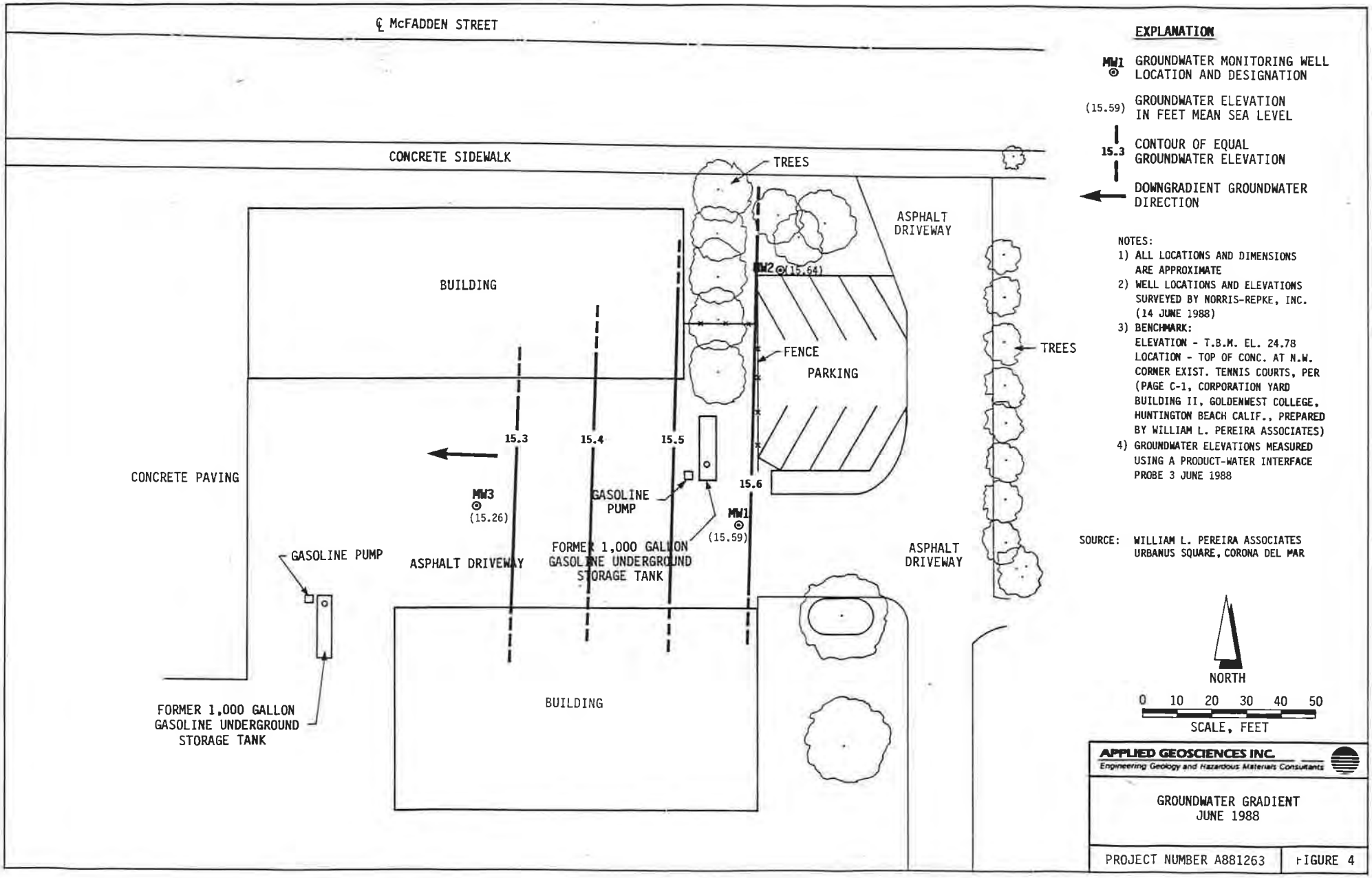
0 10 20

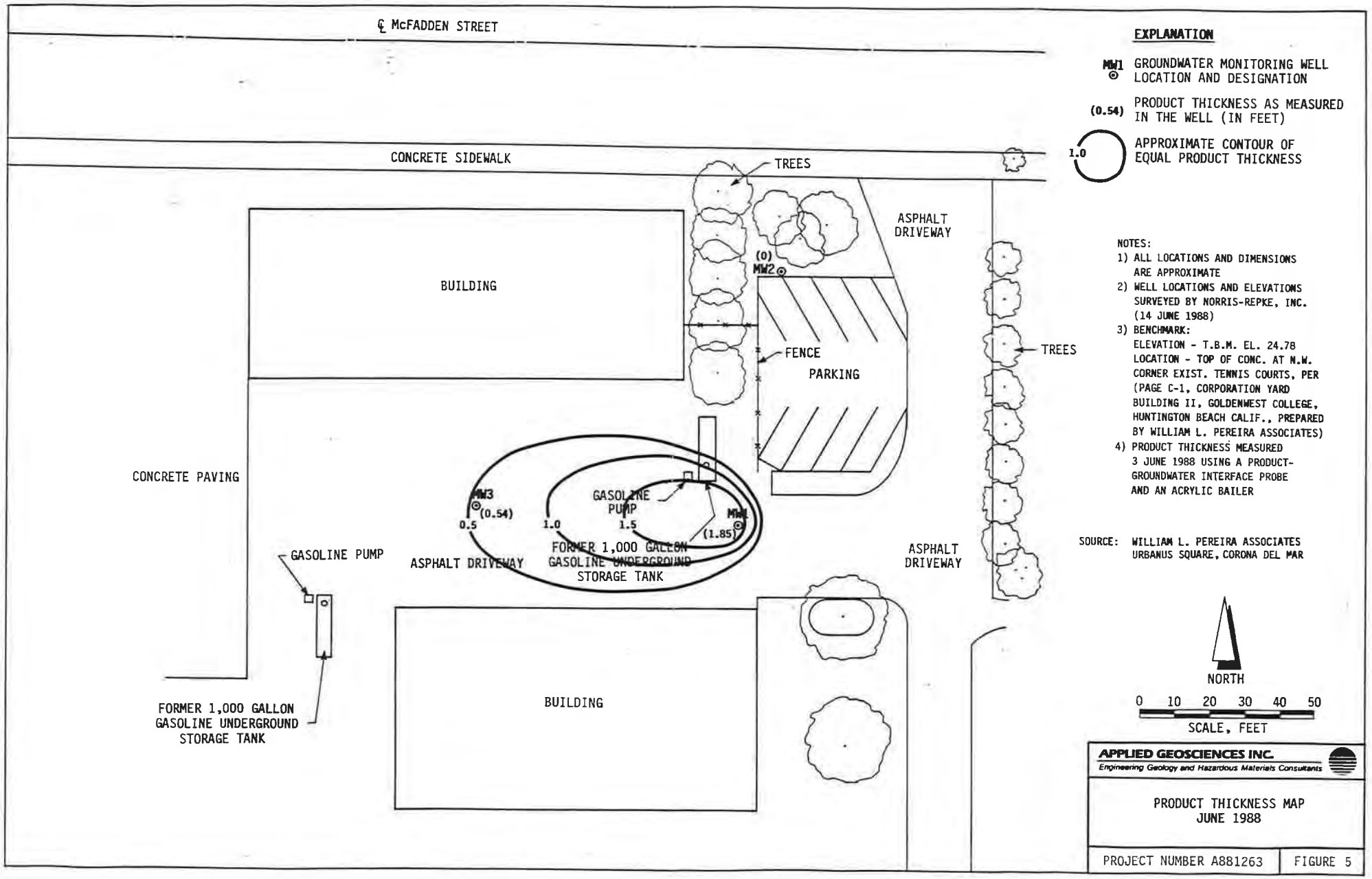
HORIZONTAL SCALE, FEET

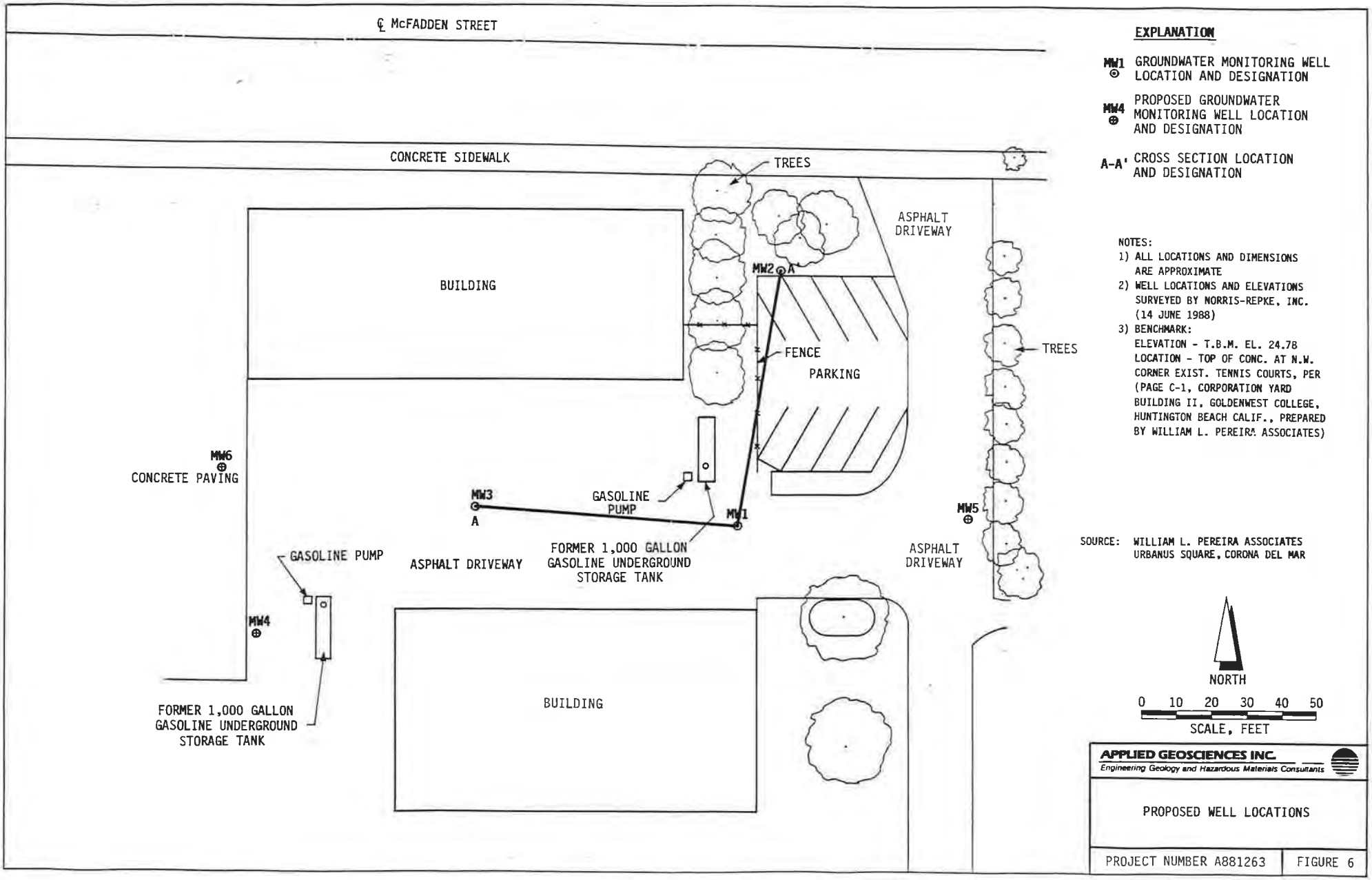
APPLIED GEOSCIENCES INC.
Engineering Geology and Hazardous Materials Consultants

GENERALIZED SUBSURFACE
CROSS SECTION A-A'

PROJECT NUMBER A881263 | FIGURE 3


℄ McFADDEN STREET
CONCRETE SIDEWALK
TREES
ASPHALT DRIVEWAY
BUILDING
MW2 (15.64)
FENCE
PARKING
TREES
15.3
15.4
15.5
15.6
CONCRETE PAVING
MW3
(15.26)
GASOLINE PUMP
MW1
(15.59)
GASOLINE PUMP
ASPHALT DRIVEWAY
FORMER 1,000 GALLON GASOLINE UNDERGROUND STORAGE TANK
ASPHALT DRIVEWAY
FORMER 1,000 GALLON GASOLINE UNDERGROUND STORAGE TANK
BUILDING
EXPLANATION
MW1 GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
(15.59) GROUNDWATER ELEVATION IN FEET MEAN SEA LEVEL
15.3 CONTOUR OF EQUAL GROUNDWATER ELEVATION
DOWNGRADIENT GROUNDWATER DIRECTION
NOTES:
1) ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE
2) WELL LOCATIONS AND ELEVATIONS SURVEYED BY NORRIS-REPKE, INC. (14 JUNE 1988)
3) BENCHMARK:
ELEVATION - T.B.M. EL. 24.78
LOCATION - TOP OF CONC. AT N.W. CORNER EXIST. TENNIS COURTS, PER (PAGE C-1, CORPORATION YARD BUILDING II, GOLDENWEST COLLEGE, HUNTINGTON BEACH CALIF., PREPARED BY WILLIAM L. PEREIRA ASSOCIATES)
4) GROUNDWATER ELEVATIONS MEASURED USING A PRODUCT-WATER INTERFACE PROBE 3 JUNE 1988
SOURCE: WILLIAM L. PEREIRA ASSOCIATES URBANUS SQUARE, CORONA DEL MAR
NORTH
0 10 20 30 40 50
SCALE, FEET
APPLIED GEOSCIENCES INC.
Engineering Geology and Hazardous Materials Consultants
GROUNDWATER GRADIENT
JUNE 1988
PROJECT NUMBER A881263
FIGURE 4


℄ McFADDEN STREET
CONCRETE SIDEWALK
TREES
ASPHALT DRIVEWAY
BUILDING
(0)
MW2
FENCE
PARKING
TREES
CONCRETE PAVING
MW3
(0.54)
0.5
1.0
GASOLINE PUMP
1.5
MW1
(1.85)
FORMER 1,000 GALLON GASOLINE UNDERGROUND STORAGE TANK
GASOLINE PUMP
ASPHALT DRIVEWAY
ASPHALT DRIVEWAY
BUILDING
FORMER 1,000 GALLON GASOLINE UNDERGROUND STORAGE TANK
EXPLANATION
MW1 GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
(0.54) PRODUCT THICKNESS AS MEASURED IN THE WELL (IN FEET)
1.0 APPROXIMATE CONTOUR OF EQUAL PRODUCT THICKNESS
NOTES:
1) ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE
2) WELL LOCATIONS AND ELEVATIONS SURVEYED BY NORRIS-REPKE, INC. (14 JUNE 1988)
3) BENCHMARK:
ELEVATION - T.B.M. EL. 24.78
LOCATION - TOP OF CONC. AT N.W. CORNER EXIST. TENNIS COURTS, PER (PAGE C-1, CORPORATION YARD BUILDING II, GOLDENWEST COLLEGE, HUNTINGTON BEACH CALIF., PREPARED BY WILLIAM L. PEREIRA ASSOCIATES)
4) PRODUCT THICKNESS MEASURED 3 JUNE 1988 USING A PRODUCT-GROUNDWATER INTERFACE PROBE AND AN ACRYLIC BAILER
SOURCE: WILLIAM L. PEREIRA ASSOCIATES URBANUS SQUARE, CORONA DEL MAR
NORTH
0 10 20 30 40 50
SCALE, FEET
APPLIED GEOSCIENCES INC.
Engineering Geology and Hazardous Materials Consultants
PRODUCT THICKNESS MAP
JUNE 1988
PROJECT NUMBER A881263
FIGURE 5



APPLIED GEOSCIENCES INC.
Engineering Geology and Hazardous Materials Consultants

PROPOSED WELL LOCATIONS

PROJECT NUMBER A881263 | FIGURE 6

APPENDIX A

BORING LOGS

APPENDIX B

LABORATORY DATA

June 9, 1988

RECEIVED
JUN 13 1988
APPLIED GEOSCIENCES

WEST COAST ANALYTICAL SERVICE, INC.
ANALYTICAL CHEMISTS

APPLIED GEOSCIENCES, INC.
17321 Irvine Blvd.
Tustin, CA 92680

Attn: Ed Sirota

JOB NO. 9722

LABORATORY REPORT

Samples Received: Six (6) water & twenty-five (25) soil samples
Date Received: 5-25-88
Released for Analysis: 5-26-88
Purchase Order No: A881263/Golden West College

The samples were analyzed as follows:

Samples Analyzed	Analysis	Results
Six soils	Fuel Hydrocarbons by modified EPA 8015 (Luft manual 1987, P.60)	Table I
Nine soils	Volatile Aromatics by EPA 8020	Data Sheets
Three soils	Fuel Hydrocarbons by modified EPA 8015/Gasoline (Luft manual 1987, P.60)	Table II

James Bonde
Senior Chemist

D. J. Northington, Ph.D.
Technical Director

9840 Alburtis Avenue • Santa Fe Springs, California 90670 • 213/948-2225

WEST COAST ANALYTICAL SERVICE, INC.

Applied Geoscience
Mr. Ed Sirota

Job # 9722
June 9, 1988

LABORATORY REPORT

TABLE I

Parts Per Million

Sample No.	Gasoline	Diesel Fuel	Kerosene	Mineral Spirits
MW 1-1-3	ND	ND	ND	ND
MW 1-2-3	508	ND	ND	ND
MW-3-1-2	ND	ND	ND	ND
MW 3-2-2	ND	ND	ND	ND
MW 2-1	ND	ND	ND	ND
MW 2-3-1	ND	ND	ND	ND
Detection Limit	10	10	10	10

Date Analyzed: 6-7-88

TABLE II

Parts Per Million

Sample No.	Gasoline	Detection Limit
MW 1-2	180	0.050
MW 2-2	ND	0.010
MW 3-2	83	0.5

Date Analyzed: 6-7-88

ND - Not Detected

Client: APPLIED GEOSCIENCES
Job No: 9722
Date Analyzed: 03-JUNE-88
Analysis: EPA 602 (8020)

Sample: MW 1-2
Matrix: Water
Samp Amt: 0.005 mL
Dil Fact: 1

Compound	Concentration ug/L	Detection Limits
Benzene	2900	200
Toluene	11000	200
Chlorobenzene	ND	*3200
Ethylbenzene	5300	200
Total Xylenes	31000	200
1,3-Dichlorobenzene	ND	200
1,4-Dichlorobenzene	ND	200
1,2-Dichlorobenzene	ND	*3500

ND-Not Detected. The limit of detection is reported above.

* The detection limits were raised due to the possible co-elution with other hydrocarbons.

Client: APPLIED GEOSCIENCES
Job No: 9722
Date Analyzed: 03-JUNE-88
Analysis: EPA 602 (8020)

Sample: MW 3-2
Matrix: Water
Samp Amt: 0.005 mL
Dil Fact: 1

Compound	Concentration ug/L	Detection Limits
Benzene	15000	200
Toluene	18000	200
Chlorobenzene	ND	*350
Ethylbenzene	2900	200
Total Xylenes	14000	200
1,3-Dichlorobenzene	ND	*500
1,4-Dichlorobenzene	ND	200
1,2-Dichlorobenzene	ND	*750

ND-Not Detected. The limit of detection is reported above.

* The detection limits were raised due to the possible co-elution with other hydrocarbons.

Client: APPLIED GEOSCIENCES
Job No: 9722
Date Analyzed: 03-JUNE-88
Analysis: EPA 602 (8020)

Sample: MW 2-2
Matrix: Water
Samp Amt: 5 mL
Dil Fact: 1

Compound	Concentration ug/L	Detection Limits
Benzene	1.3	0.2
Toluene	1.9	0.2
Chlorobenzene	ND	0.2
Ethylbenzene	0.74	0.2
Total Xylenes	3.4	0.2
1,3-Dichlorobenzene	ND	*0.3
1,4-Dichlorobenzene	ND	0.2
1,2-Dichlorobenzene	ND	*0.3

ND-Not Detected. The limit of detection is reported above.

* The detection limits were raised due to the possible co-elution with other hydrocarbons.

Client: APPLIED GEOSCIENCES
Job No: 9722
Date Analyzed: 03-JUNE-88
Analysis: EPA 602 (8020)

Sample: MW 2-3-1
Matrix: Soil
Samp Amt: 1 gm
Dil Fact: 1

Compound	Concentration ug/Kg	Detection Limits
Benzene	25	1
Toluene	8.9	1
Chlorobenzene	ND	1
Ethylbenzene	1.8	1
Total Xylenes	12	1
1,3-Dichlorobenzene	ND	1
1,4-Dichlorobenzene	ND	1
1,2-Dichlorobenzene	ND	1

ND-Not Detected. The limit of detection is reported above.

Client: APPLIED GEOSCIENCES
Job No: 9722
Date Analyzed: 06-Jun-88
Analysis: EPA 602 (8020)

Sample: MW 1-2-3
Matrix: Soil
Samp Amt: 1 gm
Dil Fact: 400

Compound	Concentration ug/g	Detection Limits
Benzene	9.4	0.4
Toluene	110	0.4
Chlorobenzene	ND	*3
Ethylbenzene	41	0.4
Total Xylenes	220	0.4
1,3-Dichlorobenzene	ND	*3
1,4-Dichlorobenzene	ND	0.4
1,2-Dichlorobenzene	ND	*20

ND-Not Detected. The limit of detection is reported above.
*Higher detection limits due to interferences from other hydrocarbons.

Client: APPLIED GEOSCIENCES
Job No: 9722
Date Analyzed: 04-JUNE-88
Analysis: EPA 602 (8020)

Sample: MW 3-1-2
Matrix: Soil
Samp Amt: 0.3 gm
Dil Fact: 1

Compound	Concentration ug/Kg	Detection Limits
Benzene	25	4
Toluene	42	4
Chlorobenzene	ND	4
Ethylbenzene	19	4
Total Xylenes	160	4
1,3-Dichlorobenzene	ND	*10
1,4-Dichlorobenzene	ND	4
1,2-Dichlorobenzene	ND	*25

ND-Not Detected. The limit of detection is reported above.

* These detection limits have been raised due to the possible co-elution with other hydrocarbons.

Client: APPLIED GEOSCIENCES
Job No: 9722
Date Analyzed: 04-JUNE-88
Analysis: EPA 602 (8020)

Sample: MW 2-1
Matrix: Soil
Samp Amt: 1 gm
Dil Fact: 1

Compound	Concentration ug/Kg	Detection Limits
Benzene	4.8	1
Toluene	4.2	1
Chlorobenzene	ND	1
Ethylbenzene	ND	1
Total Xylenes	2.4	1
1,3-Dichlorobenzene	ND	*2
1,4-Dichlorobenzene	ND	1
1,2-Dichlorobenzene	ND	1

ND-Not Detected. The limit of detection is reported above.

* The detection limits were raised due to the possible co-elution with other hydrocarbons.

Client: APPLIED GEOSCIENCES
Job No: 9722
Date Analyzed: 04-JUNE-88
Analysis: EPA 602 (8020)

Sample: MW 1-1-3
Matrix: Soil
Samp Amt: 0.5 gm
Dil Fact: 1

Compound	Concentration ug/Kg	Detection Limits
Benzene	6.5	2
Toluene	12	2
Chlorobenzene	ND	2
Ethylbenzene	5.7	2
Total Xylenes	83	2
1,3-Dichlorobenzene	ND	2
1,4-Dichlorobenzene	ND	2
1,2-Dichlorobenzene	ND	*20

ND-Not Detected. The limit of detection is reported above.

* The detection limits were raised due to the possible co-elution with other hydrocarbons.

Client: APPLIED GEOSCIENCES
Job No: 9722
Date Analyzed: 04-JUNE-88
Analysis: EPA 602 (8020)

Sample: MW 3-2-2
Matrix: Soil
Samp Amt: 0.7 gm
Dil Fact: 1

Compound	Concentration ug/Kg	Detection Limits
Benzene	2.3	2
Toluene	3.0	2
Chlorobenzene	ND	2
Ethylbenzene	ND	2
Total Xylenes	3.5	2
1,3-Dichlorobenzene	ND	2
1,4-Dichlorobenzene	ND	2
1,2-Dichlorobenzene	ND	*3

ND-Not Detected. The limit of detection is reported above.

* The detection limits were raised due to the possible co-elution with other hydrocarbons.

APPLIED GEOSCIENCES INC.

SHIPMENT NO.: _____

CHAIN OF CUSTODY RECORD

PAGE 1 OF 2

PROJECT NAME: GOLDEN WEST COLLEGE

DATE 5/25/88

PROJECT NO.: AB8812.63

B9722

Sample Number	Location	Type of Sample: Material	Type of Sample: Method	Type of Container	Type of Preservation: Temp	Type of Preservation: Chemical	Analysis Required*
MW1-1	MW1	WATER	BAILER	VOA VIALS	COOL	ICE	8015
MW1-2	MW1						8020
MW2-1	MW2						8015
MW2-2	MW2						8020
MW3-1	MW3						8015
MW3-2	MW3						8020
MW1-1-2	MW1	SOIL	SS PSCN	SS 4" TUBE			
MW1-1-3							8015/8020
MW1-2-2							
MW1-2-3							8015/8020
MW1-3-2							
MW1-3-3							
MW1-4-2							
MW1-4-3							
MW3-1-2	MW3						8015/8020
MW3-1-3							
MW3-2-2							8015/8020
MW3-2-3							
MW3-3-2							
MW3-3-1							

Total Number of Samples Shipped: 21 | Sampler's Signature: Harry Stiebler

Relinquished By: Signature Harry Stiebler; Printed Name HARRY STIEBLER; Company APPLIED GEOSCIENCES INC.; Reason TO LAB	Received By: Signature Bob Olson; Printed Name Bob Olson; Company WCAS	Date 5/25/88; Time 4:12
Relinquished By: Signature ____; Printed Name ____; Company ____; Reason ____	Received By: Signature ____; Printed Name ____; Company ____	Date / /; Time ____
Relinquished By: Signature ____; Printed Name ____; Company ____; Reason ____	Received By: Signature ____; Printed Name ____; Company ____	Date / /; Time ____
Relinquished By: Signature ____; Printed Name ____; Company ____; Reason ____	Received By: Signature ____; Printed Name ____; Company ____	Date / /; Time ____

Special Shipment / Handling / Storage Requirements:

* Note – This does not constitute authorization to proceed with analysis

APPLIED GEOSCIENCES INC.

SHIPMENT NO.:

CHAIN OF CUSTODY RECORD

PAGE 2 OF 2

DATE 5/28/88

PROJECT NAME: GOLDEN WEST COLLEGE

PROJECT NO.: A881263

#9722

Sample Number	Location	Type of Sample: Material	Type of Sample: Method	Type of Container	Type of Preservation: Temp	Type of Preservation: Chemical	Analysis Required*
MW3-4-1	MW3			5x 4" TUBE	CHILL	ICE	HOLD
MW3-4-2							
MW3-4-3							
MW2-1	MW2						8015/8020
MW2-2							
MW2-3-1							8015/8020
MW2-3-2							
MW2-4-2							
MW2-4-3							
MW2-5-1							
MW2-5-2							

Total Number of Samples Shipped: 31 | Sampler's Signature: Mary Stiehler

Relinquished By:	Received By:	Date / Time
Signature: Mary Stiehler Printed Name: MARY STIENLER Company: APPLIED GEOSCIENCES INC. Reason: TO LAB	Signature: Bob Olson Printed Name: Bob Olson Company: WCAS	Date: 5/25/88 Time: 4:12
Signature: Printed Name: Company: Reason:	Signature: Printed Name: Company:	Date: / / Time:
Signature: Printed Name: Company: Reason:	Signature: Printed Name: Company:	Date: / / Time:
Signature: Printed Name: Company: Reason:	Signature: Printed Name: Company:	Date: / / Time:

Special Shipment / Handling / Storage Requirements:

* Note – This does not constitute authorization to proceed with analysis

Table 1
Golden West College Maintenance Yard
Groundwater Elevation and Product Thickness Data

Well Number	Well Elevation *	Date Monitored		Depth to Groundwater	Depth to Free Product	Product Thickness	Groundwater Elevation	Comments
MW-04	24.01	7/8/94		9.97	No FHP	0.00	14.04	Stagnant odor, no sheen
		8/5/94		10.42	No FHP	0.00	13.59	No odor
		8/25/94		10.58	No FHP	0.00	13.43	No odor
		9/8/94	**	10.86	No FHP	0.00	13.15	No sheen or odor
		11/3/94		10.94	No FHP	0.00	13.07	
		11/17/94		10.97	No FHP	0.00	13.04	No odor
		12/22/94		10.32	No FHP	0.00	13.69	No odor or sheen
		4/12/95		8.90	No FHP	0.00	15.11	No odor or sheen, system off
		6/27/95		9.46	No FHP	0.00	14.55	No odor
		1/10/96		9.35	No FHP	0.00	14.66	No odor or sheen
		4/25/96		8.62	No FHP	0.00	15.39	No odor or sheen
		8/14/96		10.01	No FHP	0.00	14.00	No odor or sheen
		11/20/96		9.8	No FHP	0.00	14.21	No odor or sheen
		2/20/97		7.8	No FHP	0.00	16.21	No odor or sheen
		3/30/98		6.24	No FHP	0.00	17.77	
		7/8/98		7.93	No FHP	0.00	16.08	No odor or sheen
		2/16/99		8.51	No FHP	0.00	15.50	
		7/30/99		**8.83**	**No FHP**	**0.00**	**15.18**	No odor or sheen
MW-05	24.21	7/8/94		NA	NA	NA	NA	Unable to open well box
		8/5/94		10.39	No FHP	0.00	13.82	No odor
		8/25/94		10.45	No FHP	0.00	13.76	No odor
		9/8/94	**	10.74	No FHP	0.00	13.47	No sheen or odor
		11/3/94		10.90	No FHP	0.00	13.31	
		11/17/94		10.94	No FHP	0.00	13.27	No odor
		12/22/94		10.32	No FHP	0.00	13.89	No odor or sheen
		4/12/95		8.81	No FHP	0.00	15.40	No odor or sheen, system off
		6/27/95		9.36	No FHP	0.00	14.85	No odor

Table 1
Golden West College Maintenance Yard
Groundwater Elevation and Product Thickness Data

Well Number	Well Elevation *	Date Monitored		Depth to Groundwater	Depth to Free Product	Product Thickness	Groundwater Elevation	Comments
MW-05	24.21	1/10/96		9.08	No FHP	0.00	15.13	No odor or sheen
		4/25/96		8.45	No FHP	0.00	15.76	No odor or sheen
		8/14/96		9.95	No FHP	0.00	14.26	No odor or sheen
		11/20/96		9.63	No FHP	0.00	14.58	No odor or sheen
		2/20/97		7.65	No FHP	0.00	16.56	No odor or sheen
		3/30/98		6.16	No FHP	0.00	18.05	
		7/8/98		7.90	No FHP	0.00	16.31	No odor or sheen
		2/16/99		8.32	No FHP	0.00	15.89	
		7/30/99		**8.65**	**No FHP**	**0.00**	**15.56**	
MW-06	24.57	7/8/94		8.67	No FHP	0.00	15.90	No odor or sheen
		8/5/94		8.95	No FHP	0.00	15.62	No odor
		8/25/94		9.18	No FHP	0.00	15.39	No odor
		9/8/94	**	9.36	No FHP	0.00	15.21	No sheen or odor
		11/3/94		9.50	No FHP	0.00	15.07	
		11/17/94		9.53	No FHP	0.00	15.04	No odor
		12/22/94		9.32	No FHP	0.00	15.25	No odor
		4/12/95		7.41	No FHP	0.00	17.16	No odor or sheen, system off
		6/27/95		7.90	No FHP	0.00	16.67	No odor
		1/10/96		8.66	No FHP	0.00	15.91	No odor or sheen
		4/25/96		7.91	No FHP	0.00	16.66	No odor or sheen
		8/14/96		8.79	No FHP	0.00	15.78	No odor or sheen
		11/20/96		9.04	No FHP	0.00	15.53	No odor or sheen
		2/20/97		6.81	No FHP	0.00	17.76	No odor or sheen
		3/30/98		5.48	No FHP	0.00	19.09	
		7/9/98		7.33	No FHP	0.00	17.24	No odor or sheen
		2/16/99		8.09	No FHP	0.00	16.48	
		7/30/99		**8.48**	**No FHP**	**0.00**	**16.09**	No odor or sheen

Table 1
Golden West College Maintenance Yard
Groundwater Elevation and Product Thickness Data

Well Number	Well Elevation *	Date Monitored		Depth to Groundwater	Depth to Free Product	Product Thickness	Groundwater Elevation	Comments
MW-07	24.46	7/8/94		9.79	No FHP	0.00	14.67	Stagnant odor, no sheen
		8/5/94		10.48	No FHP	0.00	13.98	Stagnant odor
		8/25/94		10.41	No FHP	0.00	14.05	Slight stagnant odor
		9/8/94	**	10.82	No FHP	0.00	13.64	No sheen or odor
		11/3/94		10.99	No FHP	0.00	13.47	
		11/17/94		11.07	No FHP	0.00	13.39	No odor
		12/22/94		9.94	No FHP	0.00	14.52	No odor
		4/12/95		8.99	No FHP	0.00	15.47	No odor or sheen, system off
		6/27/95		9.72	No FHP	0.00	14.74	Stagnant odor
		1/10/96		8.96	No FHP	0.00	15.50	Stagnant odor, no sheen
		4/25/96		8.22	No FHP	0.00	16.24	Stagnant odor, no sheen
		8/14/96		10.97	No FHP	0.00	13.49	No odor
		11/20/96		9.37	No FHP	0.00	15.09	Stagnant odor, no sheen
		2/20/97		7.25	No FHP	0.00	17.21	Stagnant odor
		3/30/98		5.81	No FHP	0.00	18.65	
		7/9/98		7.77	No FHP	0.00	16.69	No odor or sheen
		2/16/99		8.29	No FHP	0.00	16.17	
		7/30/99		**8.67**	**No FHP**	**0.00**	**15.79**	Yellow colored water
MW-08	24.60	7/8/94		11.01	No FHP	0.00	13.59	Slight stagnant odor, no sheen
		8/5/94		12.08	No FHP	0.00	12.52	Slight hydrocarbon odor, sheen
		8/25/94		11.41	No FHP	0.00	13.19	Slight stagnant odor
		9/8/94	**	12.35	No FHP	0.00	12.25	Sheen and odor
		9/27/94		12.29	No FHP	0.00	12.31	
		9/29/94		11.58	No FHP	0.00	13.02	
		10/6/94		12.05	No FHP	0.00	12.55	
		11/3/94		12.41	No FHP	0.00	12.19	
		11/17/94		12.50	No FHP	0.00	12.10	Sheen, moderate odor

Table 1
Golden West College Maintenance Yard
Groundwater Elevation and Product Thickness Data

Well Number	Well Elevation *	Date Monitored		Depth to Groundwater	Depth to Free Product	Product Thickness	Groundwater Elevation	Comments
MW-08	24.60	12/22/94		10.22	No FHP	0.00	14.38	Odor and sheen
		4/12/95		10.47	No FHP	0.00	14.13	No odor or sheen, system off
		6/27/95		11.72	No FHP	0.00	12.88	Stagnant odor
		1/10/96		9.22	No FHP	0.00	15.38	Sheen, stagnant odor
		4/25/96		8.58	No FHP	0.00	16.02	Sheen, hydrocarbon odor
		8/14/96		11.28	No FHP	0.00	13.32	Sheen, hydrocarbon odor
		11/20/96		9.59	No FHP	0.00	15.01	Sheen, hydrocarbon odor
		2/20/97		7.58	No FHP	0.00	17.02	Sheen, hydrocarbon odor
		3/30/98		6.05	No FHP	0.00	18.55	
		7/9/98		7.94	No FHP	0.00	16.66	Grey cloudy water, hydrocarbon odor
		2/16/99		8.57	No FHP	0.00	16.03	
		7/30/99		**8.90**	**No FHP**	**0.00**	**15.70**	Grey silty water, hydrocarbon odor
MW-09	23.83	7/8/94		8.62	No FHP	0.00	15.21	No odor or sheen
		8/5/94		8.94	No FHP	0.00	14.89	No odor
		8/25/94		9.23	No FHP	0.00	14.60	No odor
		9/8/94	**	9.48	No FHP	0.00	14.35	No sheen or odor
		11/3/94		9.62	No FHP	0.00	14.21	
		11/17/94		9.63	No FHP	0.00	14.20	No odor
		12/22/94		9.30	No FHP	0.00	14.53	
		4/12/95		7.52	No FHP	0.00	16.31	No odor or sheen, system off
		6/27/95		8.18	No FHP	0.00	15.65	No odor
		1/10/96		8.22	No FHP	0.00	15.61	No odor or sheen
		4/25/96		7.47	No FHP	0.00	16.36	No odor or sheen
		8/14/96		8.99	No FHP	0.00	14.84	No odor or sheen
		11/20/96		8.75	No FHP	0.00	15.08	No odor or sheen
		2/20/97		6.69	No FHP	0.00	17.14	No odor or sheen
		3/30/98		5.47	No FHP	0.00	18.36	

Table 1
Golden West College Maintenance Yard
Groundwater Elevation and Product Thickness Data

Well Number	Well Elevation *	Date Monitored		Depth to Groundwater	Depth to Free Product	Product Thickness	Groundwater Elevation	Comments
MW-09	23.83	7/8/98		7.08	No FHP	0.00	16.75	Grey cloudy water, no odor or sheen
		2/16/99		7.52	No FHP	0.00	16.31	
		7/30/99		**7.88**	**No FHP**	**0.00**	**15.95**	
MW-10	25.53	7/8/94		10.73	No FHP	0.00	14.80	No odor or sheen
		8/5/94		11.32	No FHP	0.00	14.21	Slight stagnant odor
		8/25/94		11.40	No FHP	0.00	14.13	No odor
		9/8/94	**	11.76	No FHP	0.00	13.77	No sheen or odor
		11/3/94		11.85	No FHP	0.00	13.68	
		11/17/94		11.95	No FHP	0.00	13.58	No odor
		12/22/94		11.22	No FHP	0.00	14.31	No odor
		4/12/95		9.89	No FHP	0.00	15.64	No odor or sheen, system off
		6/27/95		10.52	No FHP	0.00	15.01	No odor
		1/10/96		10.33	No FHP	0.00	15.20	No odor or sheen
		4/25/96		9.59	No FHP	0.00	15.94	No odor or sheen
		8/14/96		11.03	No FHP	0.00	14.50	No odor or sheen
		11/20/96		10.62	No FHP	0.00	14.91	No odor or sheen
		2/20/97		8.67	No FHP	0.00	16.86	No odor or sheen
		3/30/98		7.08	No FHP	0.00	18.45	
		7/8/98		8.91	No FHP	0.00	16.62	No odor or sheen
		2/16/99		9.56	No FHP	0.00	15.97	
		7/30/99		**9.94**	**No FHP**	**0.00**	**15.59**	
RW-01	23.6	7/8/94		10.58	No FHP	0.00	13.02	Stagnant odor, no sheen
		8/5/94		16.18	No FHP	0.00	7.42	Slight hydrocarbon odor
		8/25/94		11.54	No FHP	0.00	12.06	Slight stagnant odor
		9/8/94	**	13.38	No FHP	0.00	10.22	Sheen and odor
		9/27/94		13.70	No FHP	0.00	9.90	

Table 1
Golden West College Maintenance Yard
Groundwater Elevation and Product Thickness Data

Well Number	Well Elevation *	Date Monitored		Depth to Groundwater	Depth to Free Product	Product Thickness	Groundwater Elevation	Comments
RW-01	23.6	9/29/94		10.68	No FHP	0.00	12.92	
		10/6/94		13.54	No FHP	0.00	10.06	
		11/3/94		14.22	No FHP	0.00	9.38	
		11/17/94		14.59	No FHP	0.00	9.01	Sheen, odor
		12/22/94		9.34	No FHP	0.00	14.26	Odor
		4/12/95		10.72	No FHP	0.00	12.88	No odor or sheen, system off
		6/27/95		15.64	No FHP	0.00	7.96	Sheen, odor
		1/10/96		-------	-------	-------	-------	Destroyed
RW-02	24.48	7/8/94		12.01	No FHP	0.00	12.47	No odor, no sheen
		8/5/94		15.32	No FHP	0.00	9.16	Hydrocarbon odor
		8/25/94		14.56	No FHP	0.00	9.92	Strong stagnant odor
		9/8/94	**	14.02	14.015	0.005	10.46	Free product
		9/27/94		14.54	No FHP	0.00	9.94	
		9/29/94		14.80	No FHP	0.00	9.68	
		10/6/94		11.66	No FHP	0.00	12.82	
		11/3/94		14.36	No FHP	0.00	10.12	
		11/17/94		15.67	No FHP	0.00	8.81	Sheen, odor
		12/22/94		10.20	No FHP	0.00	14.28	Odor
		4/12/95		14.40	No FHP	0.00	10.08	Sheen, odor, system off
		6/27/95		16.12	No FHP	0.00	8.36	Sheen, odor
		1/10/96		-------	-------	-------	-------	Destroyed
OW-01	NA	7/8/94		10.77	No FHP	0.00	NA	Stagnant odor, no sheen
		8/25/94		11.47	No FHP	0.00	NA	Moderate stagnant odor
		9/8/94	**	12.02	No FHP	0.00	NA	Sheen and odor
		9/27/94		11.87	No FHP	0.00	NA	
		9/29/94		11.13	No FHP	0.00	NA	

Table 1
Golden West College Maintenance Yard
Groundwater Elevation and Product Thickness Data

Well Number	Well Elevation *	Date Monitored		Depth to Groundwater	Depth to Free Product	Product Thickness	Groundwater Elevation	Comments
OW-01	NA	10/6/94		11.92	No FHP	0.00	NA	
		11/3/94		11.88	No FHP	0.00	NA	
		11/17/94		11.89	No FHP	0.00	NA	Strong stagnant odor
		12/22/94		9.99	No FHP	0.00	NA	Slight odor
		4/12/95		10.57	No FHP	0.00	NA	Stagnant odor, sheen, system off
		6/27/95		11.02	No FHP	0.00	NA	Sheen, odor
		1/10/96		9.00	No FHP	0.00	NA	Sheen, odor
		4/25/96		8.35	No FHP	0.00	NA	Sheen, stagnant odor
		8/14/96		11.05	No FHP	0.00	NA	Stagnant odor, slight sheen
		11/20/96		9.32	No FHP	0.00	NA	Stagnant odor, slight sheen
		3/30/98		5.88	No FHP	0.00	NA	
		7/8/98		7.74	No FHP	0.00	NA	No odor, no sheen
		1/21/99	***	8.79	No FHP	0.00	NA	
		2/16/99		8.38	No FHP	0.00	NA	
		7/30/99		**8.7**	**No FHP**	**0.00**	**NA**	Black cloudy water
Riser	NA	1/10/96		8.07	No FP	0.00	NA	Slight sheen, odor.
		4/25/96		7.41	No FP	0.00	NA	Slight sheen, stagnant odor.
		2/20/97		7.36	No FHP	0.00	NA	Stagnant odor, slight sheen

Notes:
* Elevations are in feet above Mean Sea Level, after Frey Environmental's Second Quarter 1994 Groundwater Monitoring and Well Sampling Report, May 31, 1994.
All measurements are in feet
NA = Not applicable, not available
FHP = Free hydrocarbon product
** Corrected from Third Quarter 1994 report, dated October 27, 1994

Table 2
Golden West College Maintenance Yard
Summary of Groundwater Monitoring Well Analytical Results

		8015 mod	**EPA Method 5030/8021B					EPA Method 8260B	***EPA Method 5030/8010			
Well Number	Date Sampled	TPHg (mg/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	MTBE (ug/L)	MTBE (ug/L)	PCE (ug/L)	TCE (ug/L)	cis-1,2-DCE (ug/L)	trans 1,2-DCE
MW-01	9/4/97	20	47	50	2,400	1,500	NA	NA	NA	NA	NA	
	3/30/98	8.5	(25)	25	1,500	290	NA	(5)	(25)	(25)	(25)	
	7/9/98	13	85	(10)	1,600	970	NA	(25)	(10)	(10)	(10)	(10)
	1/21/99	9.6	52	(15)	1,300	560	NA	(10)	(5.0)	(5.0)	(5.0)	(5.0)
	7/30/99	9.3	30	(30)	1,400	290	NA	(13)	(5.0)	(5.0)	(5.0)	(5.0)
OW-1	9/4/97	0.3	2.4	0.48	5.3	2.8	NA	NA	NA	NA	NA	
	3/30/98	(0.050)	(0.5)	(0.5)	(0.5)	(1.5)	NA	(5.0)	(0.5)	(0.5)	(0.5)	
	7/8/98	0.8	0.52	(0.30)	0.81	0.78	NA	(5.0)	(1.0)	(1.0)	(1.0)	(1.0)
	1/21/99	0.72	4.2	0.62	2.4	0.88	NA	(5.0)	0.79	(0.5)	(0.5)	(0.5)
	7/30/99	0.25	2.1	2.90	(0.30)	(0.60)	NA	(5.0)	(0.5)	(0.5)	(0.5)	(0.5)
MW-02	9/8/94	(0.2)	(0.30)	(0.30)	(0.30)	(0.60)	NA	NA	NA	NA	NA	
	12/22/94	0.12	(0.30)	(0.30)	(0.30)	(0.60)	NA	NA	NA	NA	NA	
	4/12/95	0.41	7.5	37	6.8	49	NA	NA	NA	NA	NA	
	6/27/95	0.27	(0.30)	(0.30)	(0.30)	(0.60)	NA	NA	NA	NA	NA	
	1/10/96	0.10	(0.30)	(0.30)	(0.30)	(0.60)	NA	NA	NA	NA	NA	
	4/25/96	0.12	(0.30)	(0.30)	(0.30)	(0.60)	NA	NA	NA	NA	NA	
	8/14/96	0.18	(0.30)	(0.30)	(0.30)	(0.60)	NA	NA	NA	NA	NA	
	11/20/96	0.08	(0.30)	(0.30)	(0.30)	(0.60)	NA	NA	NA	NA	NA	
	2/20/97	0.12	(0.30)	(0.30)	(0.30)	(0.60)	11	NA	160	150	45	
	3/30/98	0.091	(0.5)	(0.5)	(0.5)	(1.5)	NA	(5.0)	180	150	89	
(duplicate)	3/30/98	0.094	(0.5)	(0.5)	(0.5)	(1.5)	NA	(5.0)	180	150	75	
	7/9/98	0.058	(0.30)	(0.30)	(0.30)	(0.60)	NA	(5.0)	26	37	15	0.70
	1/21/99	(0.050)	(0.30)	(0.3)	(0.3)	(0.6)	NA	(5.0)	17	29	15	1.1
	7/30/99	(0.050)	(0.30)	(0.30)	(0.30)	(0.60)	NA	(5.0)	20	48	25	2.1
MW-04	9/8/94	(0.2)	(0.30)	(0.30)	(0.30)	(0.60)	NA	NA	NA	NA	NA	
	12/22/94	(0.050)	(0.30)	(0.30)	(0.30)	(0.60)	NA	NA	NA	NA	NA	
	4/12/95	0.17	4.4	25	5.0	36	NA	NA	NA	NA	NA	
	6/27/95	(0.050)	(0.30)	1.6	0.47	4.1	NA	NA	NA	NA	NA	
	1/10/96	(0.050)	(0.30)	(0.30)	(0.30)	(0.60)	NA	NA	NA	NA	NA	
	4/25/96	(0.050)	(0.30)	(0.30)	(0.30)	(0.60)	NA	NA	NA	NA	NA	

Table 2
Golden West College Maintenance Yard
Summary of Groundwater Monitoring Well Analytical Results

		8015 mod	**EPA Method 5030/8021B					EPA Method 8260B	***EPA Method 5030/8010			
Well Number	Date Sampled	TPHg (mg/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	MTBE (ug/L)	MTBE (ug/L)	PCE (ug/L)	TCE (ug/L)	cis-1,2-DCE (ug/L)	trans 1,2-DCE
MW-04	8/14/96	(0.050)	(0.30)	(0.30)	(0.30)	(0.60)	NA	NA	NA	NA	NA	
	11/20/96	(0.050)	(0.30)	(0.30)	(0.30)	(0.60)	NA	NA	NA	NA	NA	
	2/20/97	(0.050)	(0.30)	(0.30)	(0.30)	(0.60)	(10)	NA	(0.5)	(0.5)	(0.5)	
	3/30/98	(0.050)	(0.5)	(0.5)	(0.5)	(1.5)	NA	(5.0)	(0.5)	(0.5)	(0.5)	
	7/8/98	(0.050)	0.46	(0.30)	(0.30)	(0.60)	NA	25	0.61	(0.5)	(0.5)	(0.5)
	1/21/99	(0.050)	0.32	(0.30)	(0.30)	(0.60)	NA	16	0.64	(0.5)	2.0	(0.5)
(duplicate)	1/21/99	(0.050)	(0.30)	(0.30)	(0.30)	(0.60)	NA	16	0.79	(0.50)	1.5	(0.50)
	7/30/99	(0.050)	0.59	0.57	(0.30)	(0.60)	NA	18	(0.50)	(0.50)	2.8	(0.50)
MW-05	9/8/94	(0.2)	(0.30)	(0.30)	(0.30)	(0.60)	NA	NA	NA	NA	NA	
	12/22/94	(0.050)	(0.30)	(0.30)	(0.30)	(0.60)	NA	NA	NA	NA	NA	
	4/12/95	(0.050)	(0.30)	0.99	(0.30)	1.3	NA	NA	NA	NA	NA	
	6/27/95	(0.050)	(0.30)	0.48	(0.30)	1.1	NA	NA	NA	NA	NA	
	1/10/96	(0.050)	(0.30)	(0.30)	(0.30)	(0.60)	NA	NA	NA	NA	NA	
	4/25/96	(0.050)	(0.30)	(0.30)	(0.30)	(0.60)	NA	NA	NA	NA	NA	
	8/14/96	(0.050)	(0.30)	(0.30)	(0.30)	(0.60)	NA	NA	NA	NA	NA	
	11/20/96	(0.050)	(0.30)	(0.30)	(0.30)	(0.60)	NA	NA	NA	NA	NA	
	2/20/97	(0.050)	(0.30)	(0.30)	(0.30)	(0.60)	(10)	NA	(0.5)	(0.5)	(0.5)	
	3/30/98	(0.050)	(0.5)	(0.5)	(0.5)	(1.5)	NA	(5.0)	(0.5)	(0.5)	(0.5)	
	7/8/98	(0.050)	(0.30)	(0.30)	(0.30)	(0.60)	NA	(5.0)	(0.5)	(0.5)	(0.5)	(0.5)
	1/21/99	(0.050)	(0.30)	(0.30)	(0.30)	(0.60)	NA	12	0.78	(0.5)	0.53	(0.5)
	7/30/99	(0.050)	(0.30)	0.52	(0.30)	(0.60)	NA	(5.0)	(0.5)	(0.5)	0.62	(0.5)
MW-06	9/8/94	(0.2)	(0.30)	(0.30)	(0.30)	(0.60)	NA	NA	NA	NA	NA	
	12/22/94	(0.050)	(0.30)	(0.30)	(0.30)	(0.60)	NA	NA	NA	NA	NA	
	4/12/95	0.18	5.5	26	5.0	35	NA	NA	NA	NA	NA	
	6/27/95	(0.050)	(0.30)	(0.30)	(0.30)	(0.60)	NA	NA	NA	NA	NA	
	1/10/96	(0.050)	(0.30)	(0.30)	(0.30)	(0.60)	NA	NA	NA	NA	NA	
	4/25/96	(0.050)	(0.30)	(0.30)	(0.30)	(0.60)	NA	NA	NA	NA	NA	
	8/14/96	(0.050)	(0.30)	(0.30)	(0.30)	(0.60)	NA	NA	NA	NA	NA	
	11/20/96	(0.050)	(0.30)	(0.30)	(0.30)	(0.60)	NA	NA	NA	NA	NA	
	2/20/97	0.071	(0.30)	(0.30)	(0.30)	(0.60)	(10)	NA	130	80	28	
	3/30/98	(0.050)	(0.5)	(0.5)	(0.5)	(1.5)	NA	(5.0)	29	17	6.1	
	7/8/98	(0.050)	(0.30)	(0.30)	(0.30)	(0.60)	NA	(5.0)	20	12	6.1	(0.5)

Table 2
Golden West College Maintenance Yard
Summary of Groundwater Monitoring Well Analytical Results

		8015 mod	**EPA Method 5030/8021B					EPA Method 8260B	***EPA Method 5030/8010			
Well Number	Date Sampled	TPHg (mg/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	MTBE (ug/L)	MTBE (ug/L)	PCE (ug/L)	TCE (ug/L)	cis-1,2-DCE (ug/L)	trans 1,2-DCE
MW-06	1/21/99	(0.050)	(0.30)	(0.30)	(0.30)	(0.60)	NA	(5.0)	10	17	5.5	(0.5)
	7/30/99	(0.050)	(0.30)	1.3	(0.30)	(0.60)	NA	(5.0)	27	29	9.9	(5.0)
MW-07	9/8/94	2.6	382	1.5	4.2	4.3	NA	NA	NA	NA	NA	
	12/22/94	0.92	82	(1.5)	4.9	2.8	NA	NA	NA	NA	NA	
	4/12/95	1.9	91	6.2	14	13	NA	NA	NA	NA	NA	
	6/27/95	1.6	52	25	17	110	NA	NA	NA	NA	NA	
	1/10/96	1.5	17	3.7	26	150	NA	NA	NA	NA	NA	
	4/25/96	0.33	20	(0.30)	0.3	(0.60)	NA	NA	NA	NA	NA	
	8/14/96	0.16	1.4	0.36	(0.30)	(0.60)	NA	NA	NA	NA	NA	
	11/20/96	0.32	15	0.42	1.1	(0.60)	(5)	NA	NA	NA	NA	
	2/20/97	0.19	7.8	(0.30)	(0.30)	(0.60)	14	NA	(0.5)	2.6	4.5	
	3/30/98	0.19	6.2	(0.5)	(0.5)	(1.5)	NA	(5.0)	(0.5)	12	13	
	7/9/98	0.15	8.3	(0.30)	(0.30)	(0.60)	NA	(5.0)	(0.5)	15	15	5.0
	1/21/99	0.22	1.3	(0.30)	2.3	4.5	NA	(5.0)	2.3	9.5	10	3.6
	7/30/99	0.18	4.4	4.5	(0.30)	(0.60)	NA	(5.0)	(0.5)	16	14	4.7
MW-07	9/8/94	2.5	346	1.3	4.4	4.6	NA	NA	NA	NA	NA	
(duplicate)	12/22/94	0.88	74	(0.99)	4.9	2.8	NA	NA	NA	NA	NA	
	4/12/95	1.8	83	5.4	13	12	NA	NA	NA	NA	NA	
	6/27/95	0.58	19	9.2	6.6	42	NA	NA	NA	NA	NA	
	1/10/96	1.4	49	(6.0)	29	170	NA	NA	NA	NA	NA	
	4/25/96	0.31	18	(0.30)	0.3	(0.60)	NA	NA	NA	NA	NA	
	8/14/96	0.16	1.4	(0.30)	(0.30)	(0.60)	NA	NA	NA	NA	NA	
	11/20/96	0.32	16	(0.30)	1.1	(0.60)	NA	NA	NA	NA	NA	
	2/20/97	0.21	8.1	(0.30)	(0.30)	(0.60)	15	NA	(0.5)	2.9	4.9	
MW-08*	6/27/95	27	400	1,900	1,200	7,200	NA	NA	NA	NA	NA	
	9/4/97	28	210	120	2,400	4,600	NA	NA	NA	NA	NA	
	3/30/98	18	120	(25)	2200	2000	NA	940	(25)	(25)	(25)	
	7/9/98	11	90	38	1500	1200	NA	730	(10)	(10)	(10)	(10)
(duplicate)	7/9/98	7.8	95	40	1200	980	NA	690	(10)	(10)	(10)	(10)
	1/21/99	27	150	150	2000	3700	NA	470	(10)	(10)	(10)	(10)

Table 2
Golden West College Maintenance Yard
Summary of Groundwater Monitoring Well Analytical Results

		8015 mod	**EPA Method 5030/8021B					EPA Method 8260B	***EPA Method 5030/8010			
Well Number	Date Sampled	TPHg (mg/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	MTBE (ug/L)	MTBE (ug/L)	PCE (ug/L)	TCE (ug/L)	cis-1,2-DCE (ug/L)	trans 1,2-DCE
MW-08*	7/30/99	22	240	110	2000	3000	NA	330	(13)	(13)	(13)	(13)
(duplicate)	7/30/99	24	300	140	2400	3700	NA	370	(25)	(25)	(25)	(25)
MW-09	9/8/94	(0.2)	(0.30)	(0.30)	(0.30)	(0.60)	NA	NA	NA	NA	NA	
	12/22/94	(0.050)	(0.30)	(0.30)	(0.30)	(0.60)	NA	NA	NA	NA	NA	
	4/12/95	(0.050)	1.2	5.0	0.94	5.9	NA	NA	NA	NA	NA	
	6/27/95	(0.050)	(0.30)	0.36	(0.30)	0.69	NA	NA	NA	NA	NA	
	1/10/96	(0.050)	(0.30)	(0.30)	(0.30)	(0.60)	NA	NA	NA	NA	NA	
	4/25/96	(0.050)	(0.30)	(0.30)	(0.30)	(0.60)	NA	NA	NA	NA	NA	
	8/14/96	(0.050)	(0.30)	(0.30)	(0.30)	(0.60)	NA	NA	NA	NA	NA	
	11/20/96	(0.050)	(0.30)	(0.30)	(0.30)	(0.60)	NA	NA	NA	NA	NA	
	2/20/97	(0.050)	(0.30)	(0.30)	(0.30)	(0.60)	(10)	NA	0.68	(0.5)	(0.5)	
	3/30/98	(0.050)	(0.5)	(0.5)	(0.5)	(1.5)	NA	(5.0)	(0.5)	(0.5)	(0.5)	
	7/8/98	(0.050)	(0.30)	(0.30)	(0.30)	(0.60)	NA	(5.0)	(0.5)	(0.5)	(0.5)	(0.5)
	1/21/99	(0.050)	(0.30)	(0.30)	(0.30)	(0.60)	NA	(5.0)	(0.5)	(0.5)	(0.5)	(0.5)
	7/30/99	(0.050)	(0.30)	0.78	(0.30)	(0.60)	NA	(5.0)	(0.5)	(0.5)	(0.5)	(0.5)
MW-10	9/8/94	(0.2)	(0.30)	(0.30)	(0.30)	(0.60)	NA	NA	NA	NA	NA	
	12/22/94	0.052	(0.30)	(0.30)	(0.30)	(0.60)	NA	NA	NA	NA	NA	
	4/12/95	0.069	0.96	1.7	0.69	2.4	NA	NA	NA	NA	NA	
	1/12/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	6/27/95	(0.050)	(0.30)	(0.30)	(0.30)	(0.60)	NA	NA	NA	NA	NA	
	1/10/96	(0.050)	(0.30)	(0.30)	(0.30)	(0.60)	NA	NA	NA	NA	NA	
	4/25/96	(0.050)	(0.30)	(0.30)	(0.30)	(0.60)	NA	NA	NA	NA	NA	
	8/14/96	(0.050)	(0.30)	(0.30)	(0.30)	(0.60)	NA	NA	NA	NA	NA	
	11/20/96	(0.050)	(0.30)	(0.30)	(0.30)	(0.60)	NA	NA	NA	NA	NA	
	2/20/97	(0.050)	(0.30)	(0.30)	(0.30)	(0.60)	(10)	NA	(0.5)	(0.5)	(0.5)	
	3/30/98	(0.050)	(0.5)	(0.5)	(0.5)	(1.5)	NA	(5.0)	(0.5)	(0.5)	(0.5)	
	7/8/98	(0.050)	(0.30)	(0.30)	(0.30)	(0.60)	NA	(5.0)	(0.5)	(0.5)	(0.5)	(0.5)
	1/21/99	(0.050)	(0.30)	(0.30)	(0.30)	(0.60)	NA	(5.0)	1.4	(0.5)	(0.5)	(0.5)
	7/30/99	(0.050)	(0.30)	5.2	(0.30)	(0.60)	NA	(5.0)	(0.5)	(0.5)	(0.5)	(0.5)

Table 2
Golden West College Maintenance Yard
Summary of Groundwater Monitoring Well Analytical Results

		8015 mod	**EPA Method 5030/8021B					EPA Method 8260B	***EPA Method 5030/8010			
Well Number	Date Sampled	TPHg (mg/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	MTBE (ug/L)	MTBE (ug/L)	PCE (ug/L)	TCE (ug/L)	cis-1,2-DCE (ug/L)	trans 1,2-DCE

Notes:
() indicates constituent not detected at or above enclosed laboratory reporting limits.
mg/L = milligrams per liter
ug/L = micrograms per liter
* MW-08 was not previously sampled because it contained sheen
**As of January, 1999, EPA Method 8021B replaces EPA Method 8020
***As of January, 1999, EPA Method 8010 replaces EPA Method 8260
NA = Not analyzed
MTBE = Methyl tert butyl ether

Table 3
Relative Percent Difference of Quality Control Samples
July 30, 1999 Sampling Event

Sample Designation	Benzene (µg/l)	MTBE (ug/l)	PCE (ug/l)	TCE (ug/l)
MW-8	240	330	(13)*	(13)*
MW-8X Duplicate	300	370	(25)*	(25)*
RPD	22.2	11.4	63.2**	63.2**

Notes: TPHg = total petroleum hydrocarbons (as gasoline)
MTBE = methyl tertiary butyl ether

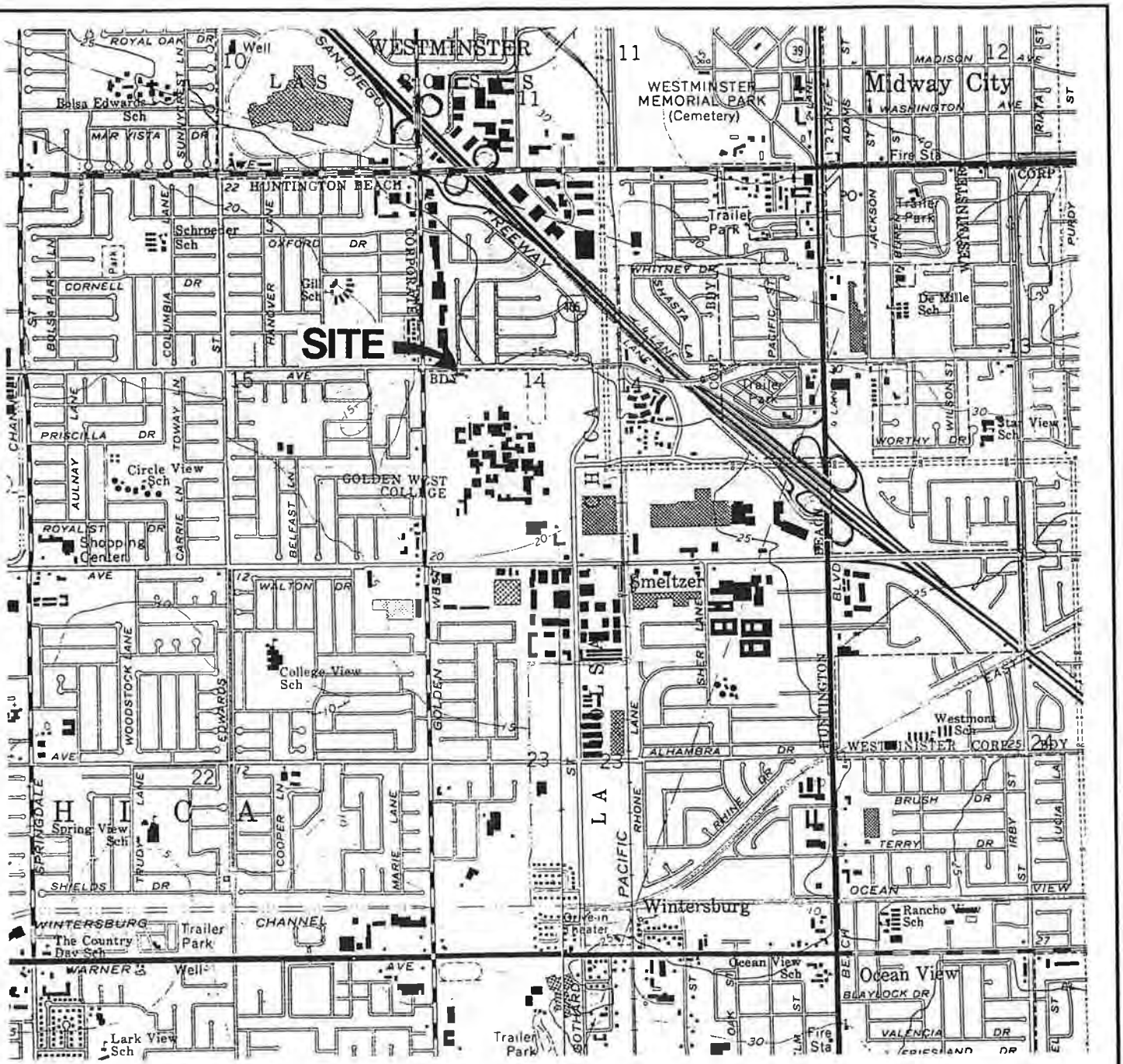
µg/l = micrograms per liter
RPD = relative percent difference

* Constituent was not detected at or above laboratory reporting limit identified in parenthesis.
** While neither sample was detected above the laboratory reporting limit, the reporting limit for the duplicate sample is higher than the original sample. This is due to a different dilution factor used by the laboratory.

The following formula is utilized to calculate the Relative Percent Difference
((C2-C1)/[(C2+C1)/2)] * 100
If a constituent is detected below the reporting limit, half of the value of the reporting limit is used to calculate the relative percent difference.

PLATES

R14 PLOT 1 = 1 HDT\31447\22-2\VICMAP



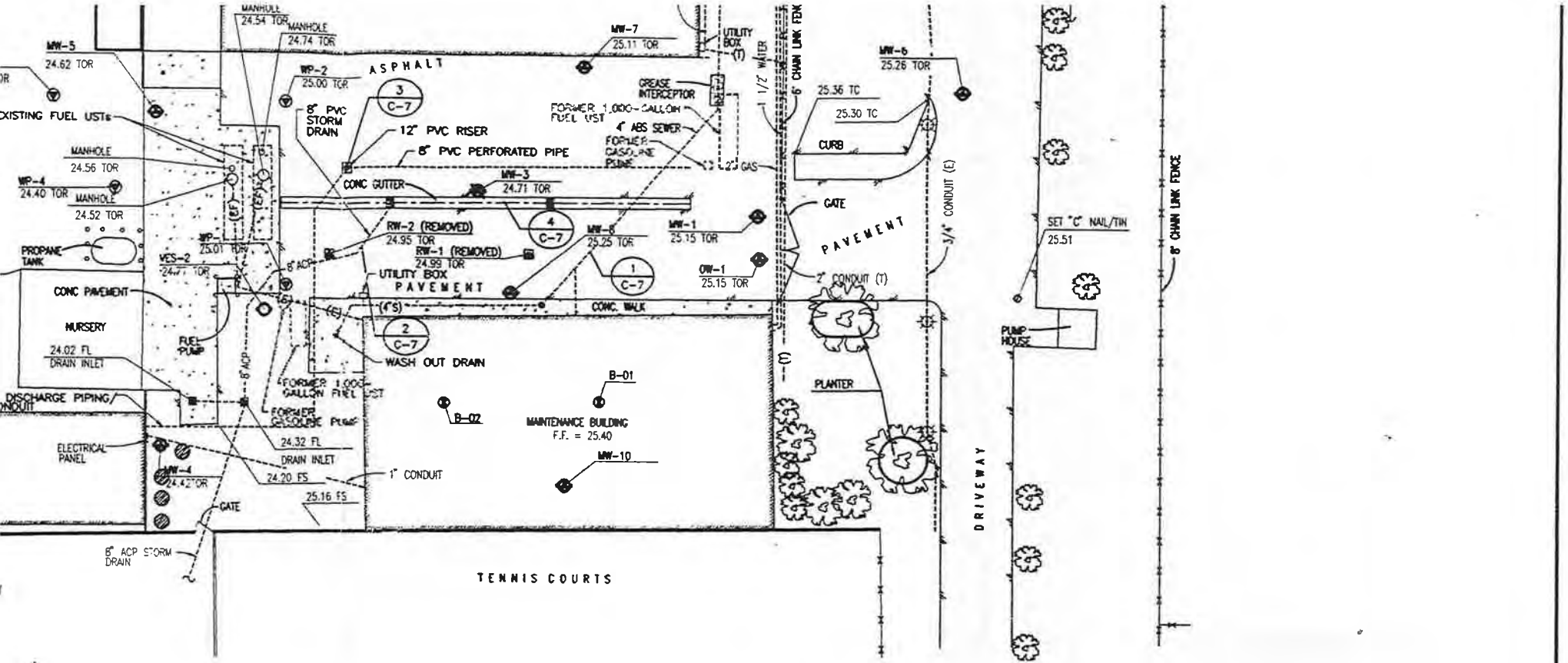
REFERENCE: USGS 7.5-MINUTE QUADRANGLES, SEAL BEACH AND NEWPORT, CALIFORNIA (PHOTOREVISED 1981)

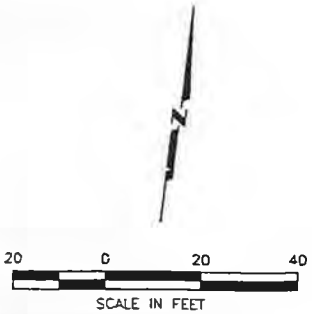
Harding Lawson Associates
Engineering and
Environmental Services

VICINITY MAP
Golden West College
Huntington Beach, California

PLATE
1

DRAWN	PROJECT-TASK NUMBER	APPROVED	DATE	REVISED DATE
JTL	31447-22.2		3/99	





EXPLANATION

GROUNDWATER MONITORING WELL	CHAIN LINK FENCE
ABANDONED GROUNDWATER MONITORING WELL	LANDSCAPE TREE
VAPOR EXTRACTION WELL	EUCALYPTUS TREE
RECOVERY WELL	CENTER LINE
HANDAUGER/WELL POINT	T TELEPHONE CONDUIT
BORING	E ELECTRICAL CONDUIT
GROUNDWATER TREATMENT TANKS	EF ELECTRICAL AND FUEL CONDUIT
EDGE OF PAVEMENT	G GAS LINE
PARKING LOT LIGHT	S SEWER LINE
POWER POLE	SD STORM DRAIN
POWER POLE W/ GUY	TOR TOP OF RIM
GAS VALVE	TC TOP OF CURB
MONOPOLE	FS FINISH SURFACE
DRAIN	FF FINISH FLOOR
	ACP ASBESTOS CEMENT PIPE
	UST UNDERGROUND STORAGE TANKS

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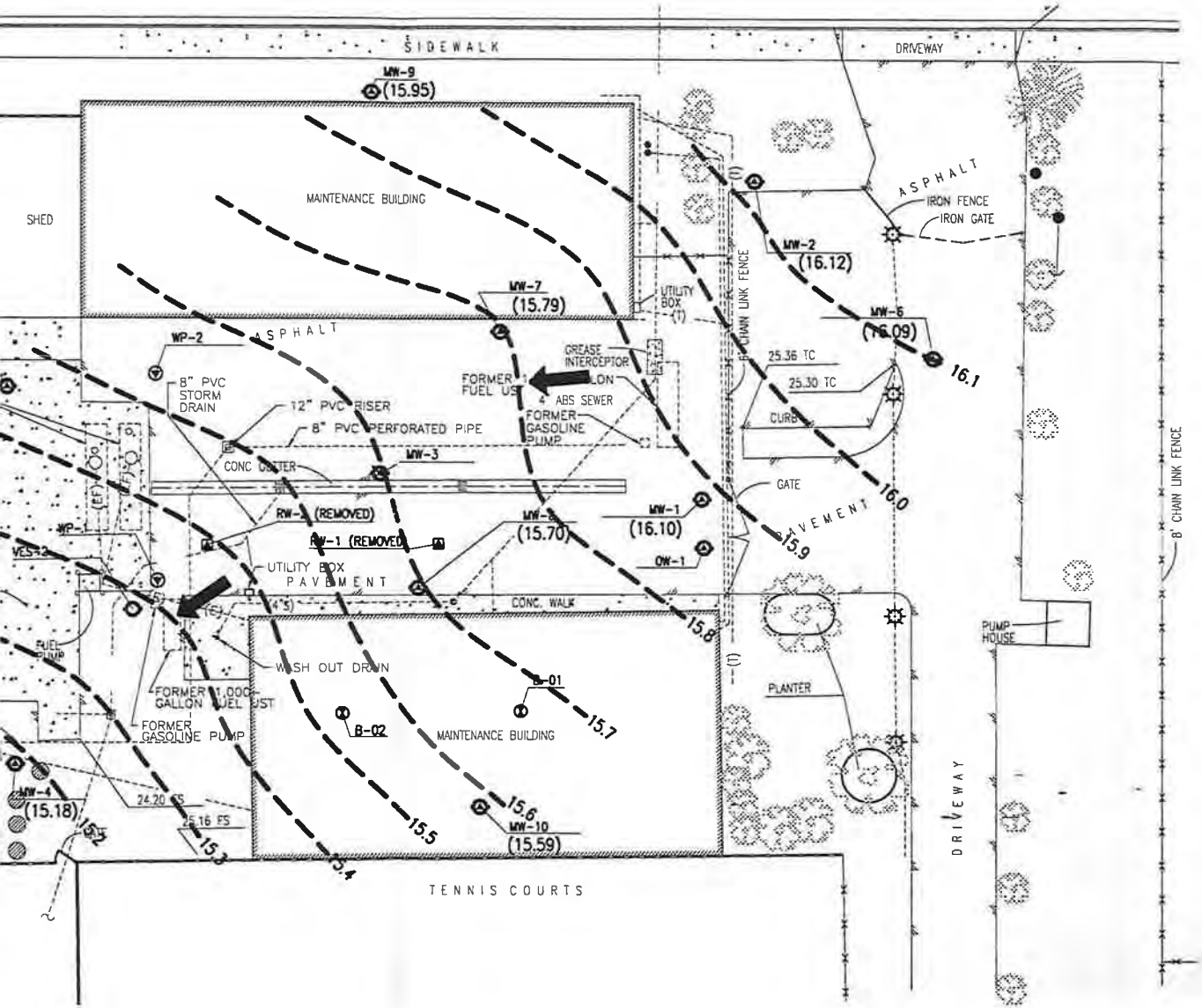
Engineering and Environmental Services
30 CORPORATE PARK, SUITE 400
IRVINE, CALIFORNIA 92714
(714) 260-1800

Golden West College Maintenance Yard
Huntington Beach, California

SITE PLAN

PLATE: 2
SHEET: OF
REVISION NUMBER:
DATE: 6/96



(15.89) GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL

GROUNDWATER ELEVATION CONTOUR, INTERVAL = 0.1 FEET

APPROXIMATE DIRECTION OF GROUNDWATER FLOW

HLA

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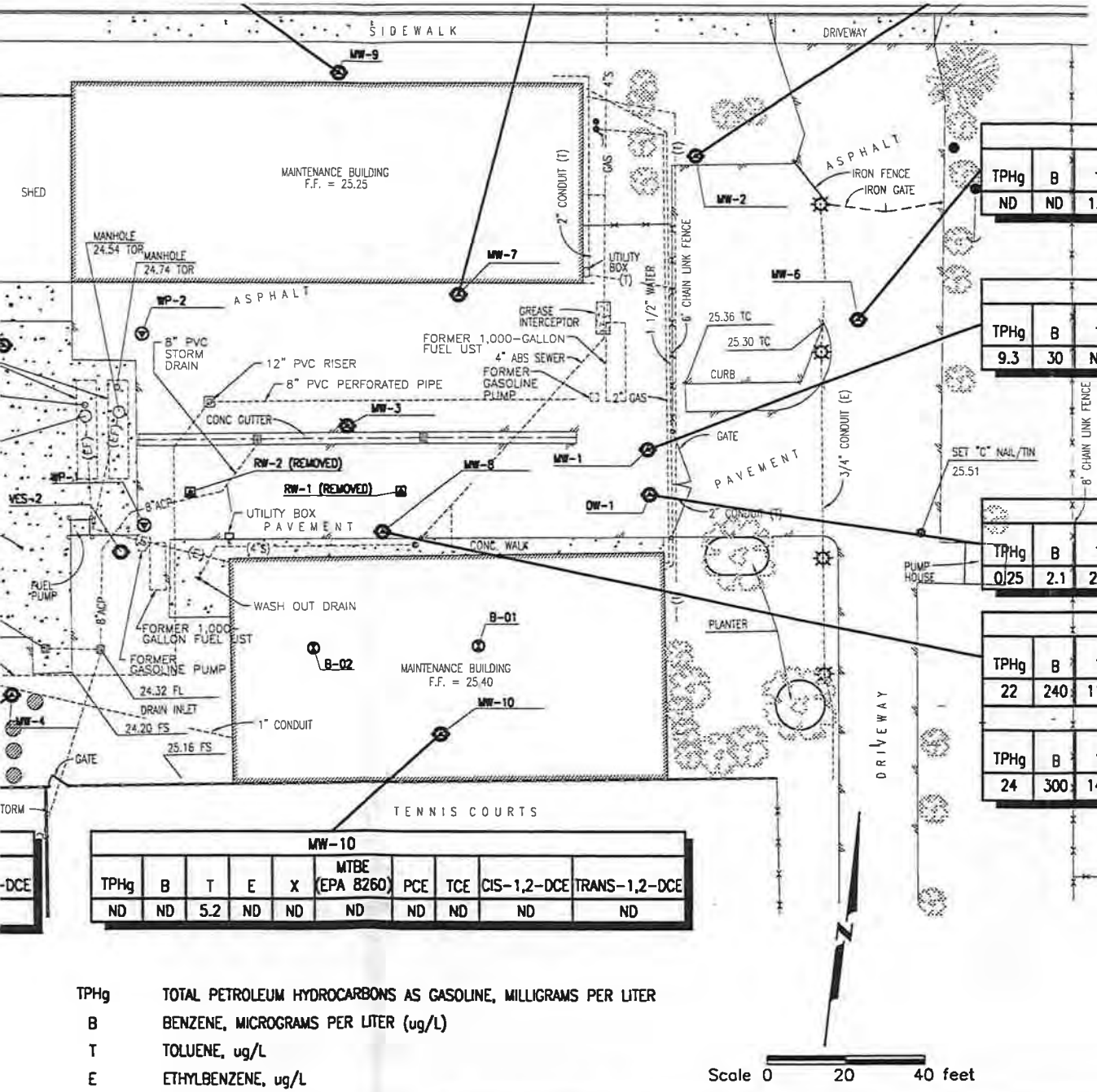
GROUNDWATER ELEVATION CONTOUR MAP, MEASURED JULY 1999
Golden West College Maintenance Yard
Huntington Beach, California

PLATE **3**

DRAWN	PROJECT–TASK NUMBER	APPROVED	DATE	REVISED DATE
JTL	31447–22.2		8/99	



MW-6									
TPHg	B	T	E	X	MTBE (EPA 8260)	PCE	TCE	CIS-1,2-DCE	TRANS-1,2-DCE
ND	ND	1.3	ND	ND	ND	27	29	9.9	ND

MW-1									
TPHg	B	T	E	X	MTBE (EPA 8260)	PCE	TCE	CIS-1,2-DCE	TRANS-1,2-DCE
9.3	30	ND	1400	290	ND	ND	ND	ND	ND

OW-1									
TPHg	B	T	E	X	MTBE (EPA 8260)	PCE	TCE	CIS-1,2-DCE	TRANS-1,2-DCE
0.25	2.1	2.9	ND	ND	ND	ND	ND	ND	ND

MW-8									
TPHg	B	T	E	X	MTBE (EPA 8260)	PCE	TCE	CIS-1,2-DCE	TRANS-1,2-DCE
22	240	110	2000	3000	330	ND	ND	ND	ND
MW-8X (DUPLICATE OF MW-8)									
TPHg	B	T	E	X	MTBE (EPA 8260)	PCE	TCE	CIS-1,2-DCE	TRANS-1,2-DCE
24	300	140	2400	3700	370	ND	ND	ND	ND

MW-10									
TPHg	B	T	E	X	MTBE (EPA 8260)	PCE	TCE	CIS-1,2-DCE	TRANS-1,2-DCE
ND	ND	5.2	ND	ND	ND	ND	ND	ND	ND

TPHg	TOTAL PETROLEUM HYDROCARBONS AS GASOLINE, MILLIGRAMS PER LITER
B	BENZENE, MICROGRAMS PER LITER (ug/L)
T	TOLUENE, ug/L
E	ETHYLBENZENE, ug/L
X	XYLENES, ug/L
MTBE	METHYL TERT BUTYL ETHER, ug/L
PCE	TETRACHLOROETHENE, ug/L
TCE	TRICHLOROETHENE, ug/L
CIS-1,2-DCE	CIS-1,2-DICHLOROETHENE, ug/L
TRANS-1,2-DCE	TRANS-1,2-DICHLOROETHENE, ug/L

HLA

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Engineering and Environmental Services

GROUNDWATER ANALYTICAL RESULTS, JULY 1999
Golden West College Maintenance Yard
Huntington Beach, California

PLATE **4**

DRAWN	PROJECT-TASK NUMBER	APPROVED	DATE	REVISED DATE
JTL	31447-22.2		8/99	

GRAPH

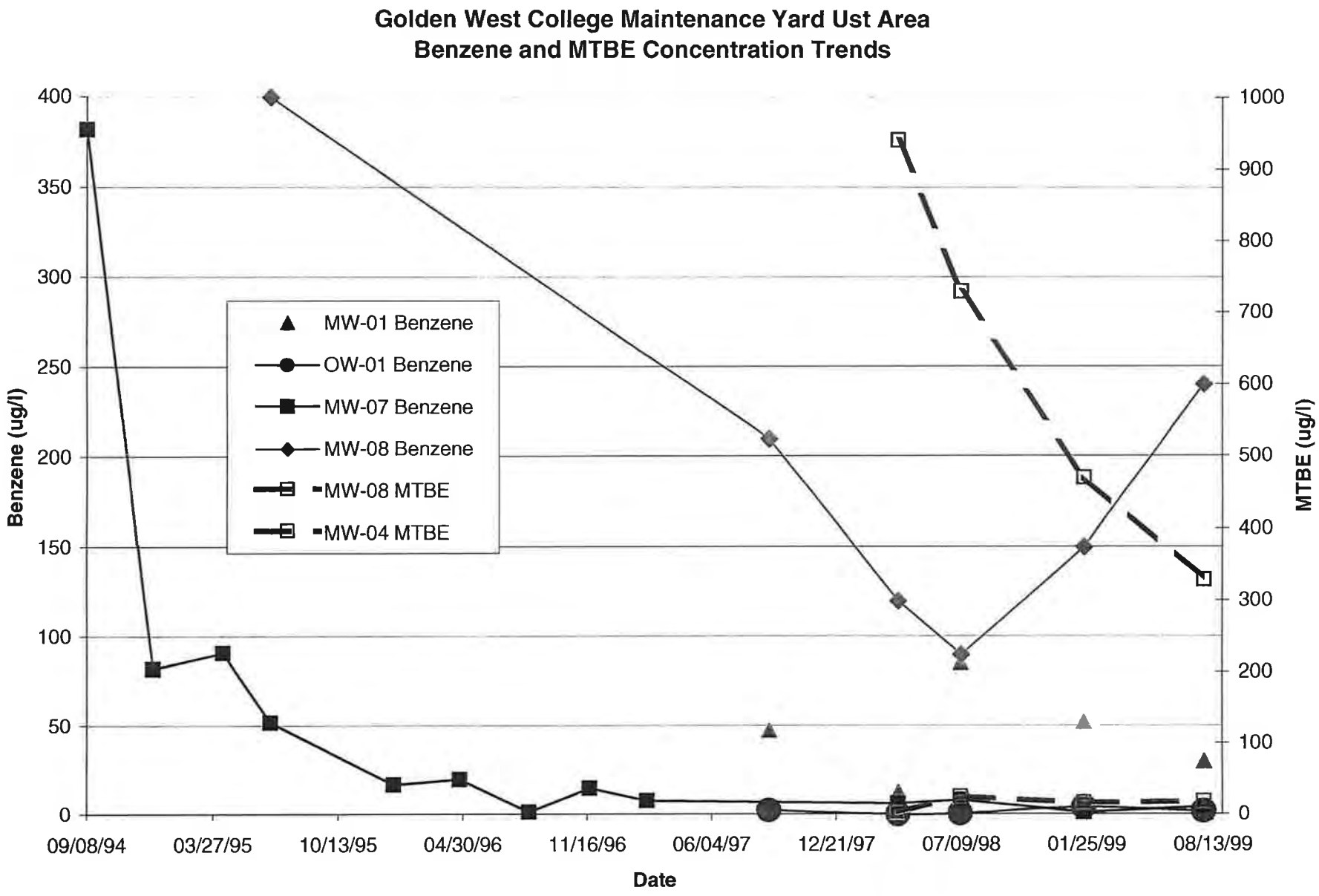
Golden West College Maintenance Yard Ust Area
Benzene and MTBE Concentration Trends
Benzene (ug/l)
MTBE (ug/l)
Date
MW-01 Benzene
OW-01 Benzene
MW-07 Benzene
MW-08 Benzene
MW-08 MTBE
MW-04 MTBE
0
50
100
150
200
250
300
350
400
0
100
200
300
400
500
600
700
800
900
1000
09/08/94
03/27/95
10/13/95
04/30/96
11/16/96
06/04/97
12/21/97
07/09/98
01/25/99
08/13/99

Table 2
Golden West College Maintenance Yard
Summary of Groundwater Monitoring Well Analytical Results

		8015 mod	5030/8021B		8260B	
Well Number	Date Sampled	TPHg (mg/L)	Benzene (ug/L)	MTBE (ug/L)	MTBE (ug/L)	Remarks
MW-01	9/4/97	20	47	NA	NA	MW-01 Benzene
	3/30/98	8.5	12.5	NA	(5.0)	
	7/8/98	13	85	NA	(25.0)	
	1/21/99	9.6	52	NA	(10.0)	
	7/30/99	9.3	30	NA	(13.0)	
OW-01	9/4/97	0.3	2.4	NA	NA	OW-01 Benzene
	3/30/98	0.025	0.3	NA	(5.0)	
	7/8/98	0.8	0.52	NA	(5.0)	
	1/21/99	0.72	4.2	NA	(5.0)	
	7/30/99	0.25	2.1	NA	(5.0)	
MW-07	9/8/94	2.6	382	NA	NA	MW-07 Benzene
	12/22/94	0.92	82	NA	NA	
	4/12/95	1.9	91	NA	NA	
	6/27/95	1.6	52	NA	NA	
	1/10/96	1.5	17	NA	NA	
	4/25/96	0.33	20	NA	NA	
	8/14/96	0.16	1.4	NA	NA	
	11/20/96	0.32	15	(5.0)	NA	
	2/20/97	0.19	7.8	14	NA	
	3/30/98	0.19	6.2	NA	(5.0)	
	7/9/98	0.15	8.3	NA	(5.0)	
	1/21/99	0.22	1.3	NA	(5.0)	
	7/30/99	0.18	4.4	NA	(5.0)	
MW-08*	6/27/95	27	400	NA	NA	MW-08 Benzene
	9/4/97	28	210	NA	NA	MW-08 MTBE
	3/30/98	18	120	NA	940	
	7/9/98	11	90	NA	730	
	1/21/99	27	150	NA	470	
MW-08*	7/30/99	22	240	NA	330	
MW-04	3/30/98	(0.050)	(0.5)	NA	(5.0)	MW-04 MTBE
	7/8/98	(0.050)	0.46	NA	25	
	1/21/99	(0.050)	0.32	NA	16	
	7/30/99	(0.050)	0.59	NA	18	

Notes:
() indicates constituent not detected at or above enclosed labor NA = Not analyzed
mg/L = milligrams per liter MTBE = Methyl tert butyl ether
ug/L = micrograms per liter
* MW-08 was not previously sampled because it contained sheen
**As of January, 1999, EPA Method 8021B replaces EPA Method 8020
***As of January, 1999, EPA Method 8010 replaces EPA Method 8260

APPENDIX A

GROUNDWATER MONITORING AND SAMPLING PROCEDURES

GROUNDWATER LEVEL MEASUREMENT AND GROUNDWATER SAMPLING FIELD PROCEDURES

FIELD PROCEDURES

Groundwater Level Measurement

Groundwater levels will be measured using an electronic well sounder. The electronic sounder uses a tape marked in 1-foot increments and intermediate 0.1-foot intervals. Groundwater levels will be recorded to the nearest 0.01 foot from an established measuring point on the top of the monitoring well casing.

Total well depth will be measured by lowering the electronic sounder to the bottom of the monitoring well. Depth to water will be measured directly off the tape from the measuring point on the top of the well casing. To assure that accurate readings will be taken, the electronic sounder will be raised and lowered two or three times before recording the measurement on the groundwater sampling form. The monitoring equipment will be cleaned between wells by washing with Liqui-Nox and rinsing with deionized water.

Quality Assurance and Quality Control of Field Measurements

To check the monitoring results, field measurements will be compared to the previous quarter's measurements. If any obvious discrepancies are noted, the well will be measured again to ensure that the measurement has been recorded correctly.

Prior to measuring the wells, the monitoring equipment will be inspected for any damage, including bends or kinks in the tape. To maintain consistency and precision, the same monitoring equipment will be used each quarter. The tape measures will be periodically compared with a calibrated tape measure to check for accuracy and to ensure that the tape measures have not stretched.

Monitoring Well Purging

The volume of groundwater to be purged from each monitoring well will be calculated based on casing volume. The purge water volume will be recorded on the groundwater sampling form. The objective of each purging cycle will be to remove a minimum of three well-casing volumes of water from the well before collecting a sample.

The order in which the wells will be purged will be from lowest to highest concentrations of contaminants based on previous analytical results. The wells will be pumped by attaching a 1/2-inch-diameter, clear polyvinyl chloride (PVC) hose to the submersible pump and lowering the pump into the monitoring well.

During pumping, the pump will be lowered to approximately 5 to 10 feet below the static water level in the monitoring well. As groundwater is extracted from the well, the temperature, pH, and electrical conductivity (EC) will be measured.

To minimize the potential for cross contamination, the purging equipment will be washed with Liqui-Nox and triple-rinsed with deionized water between wells.

Purge Water Handling and Disposal

Groundwater purged from the monitoring wells and the rinsate water will be stored onsite pending analytical results. The purged water will be appropriately disposed upon receipt of all analytical data.

Groundwater Sample Collection

A groundwater sample will be collected from the monitoring well after a minimum of three well casing volumes of water have been removed using a 2-inch-diameter Grundfos electric submersible pump, and the temperature, pH, and EC have stabilized. These readings are recorded on a Groundwater Sampling Form. After purging is completed, the wells will be allowed to recover to within 80 percent of their prepurge level before samples are collected.

The monitoring wells will be sampled using a 1.5-inch-diameter Teflon bailer with a bottom check ball. The wells will be sampled in the same order as they are purged. The bailer will be lowered to the approximate location of the pump intake. The water sample will be decanted from the bottom of the bailer into laboratory supplied containers. Sample containers will be carefully filled to avoid overflow. The vials will be immediately sealed with Teflon-lined screw lids so that the formation of air bubbles is avoided. Once the sample is sealed, it will be inverted to ensure that no air bubbles have been trapped. If air bubbles are present, the water sample will be discarded, and the procedure will be repeated until two vials are collected. To minimize the potential for cross contamination, a new bailer will be used to collect samples at each new well.

Once collected, the samples will be labeled with the monitoring well identification number and the date and time of sample collection. The samples will be double-bagged in plastic Ziploc bags and immediately placed in an ice chest filled with "blue ice" or equivalent. The samples will be recorded on a chain-of-custody form prepared and signed by the person(s) collecting the samples. Prior to shipment, the samples will be carefully packed with foam padding to avoid breakage of the sample vials during transport. The cooler will be securely strapped with shipping tape. The samples will be then shipped with the chain-of-custody form for overnight delivery to the state-certified laboratory performing the analyses.

Quality Assurance and Quality Control of Field Procedures

During the field work, written field reports will be prepared daily, documenting the work activities and any unusual events or occurrences. Groundwater monitoring and sampling report forms will be also prepared. At the end of each sampling day or as soon as possible, the written reports and the groundwater monitoring and sampling reports will be reviewed by the task manager for completeness and accuracy of data collected. Any unusual occurrences or discrepancies in the field work being performed will be noted by the task manager on the written reports and on the groundwater monitoring and sampling reports. The task manager will then communicate the discrepancies to the field personnel to verify the reports prior to beginning the following day's field work and/or the next quarter's sampling round.

Quality Assurance and Quality Control Samples

An equipment rinsate blank sample will be collected during each sampling event to test field decontamination procedures. A trip blank will also be prepared for each sampling event in the field or by a state-certified laboratory and transported with each batch of samples (if the trip blank is prepared in the field, distilled water will be used) to test for miscellaneous sources of contamination during sample handling and transport. In addition, a duplicate groundwater sample will be collected from one of the monitoring wells to test laboratory analytical procedures. The QA/QC samples will be labeled with a predetermined sample number and shipped with the other samples.

LABORATORY ANALYSIS

Laboratory Performing the Analyses and Certifications

Del Mar Analytical Laboratory in Irvine, California, will perform the analyses during the monitoring and sampling program.

Analytical Test Method

Groundwater samples will be analyzed for total petroleum hydrocarbons using EPA Method 8015 modified and volatile organic compounds using EPA Methods 8020 and 8260.

Quality Assurance and Quality Control of Laboratory Data

When the laboratory reports are received from the laboratory, data will be reviewed for completeness and accuracy. The review process consists of validating the following:

- Chain-of-custody documentation for completeness and signatures by laboratory sample control personnel.
- Type and method of analyses performed.
- Date of extraction and analysis for each batch of samples analyzed by the laboratory. Confirmation that samples were analyzed within the prescribed 14-day holding time.
- Analysis of matrix spikes, duplicates, method blanks, and surrogates and whether results were within the prescribed warning and control limits specified for each analyte.
- Comparison of results with the results of original samples analyzed for any duplicate samples submitted blindly to the laboratory.
- Signature of the laboratory QA/QC officer verifying that all tests performed met the prescribed procedures.

APPENDIX B

GROUNDWATER MONITORING AND SAMPLING FORMS

Harding Lawson Associates
Engineering and
Environmental Services

GROUND-WATER SAMPLING FORM

Job Name G. W. College
Job Number
Recorded by (Signature)

Well No. MW-1
Well Type: ☒ Monitor ☐ Extraction ☐ Other
Well Material: ☒ PVC ☐ St. Steel ☐ Other
Date 7/30/99 Time
Sampled by (Initials)

WELL PURGING

PURGE VOLUME

Casing Diameter (D in inches):
☐ 2-inch ☐ 4-inch ☐ 6-inch ☒ Other 3"
Total Depth of Casing (TD in feet BTOC): 12.21
Water Level Depth (WL in feet BTOC): 8.65
Number of Well Volumes to be purged (# Vols)
☐ 3 ☒ 4 ☐ 5 ☐ 10 ☐ Other

PURGE METHOD

☐ Bailer - Type:
☒ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:
☐ Other - Type: Whale

PUMP INTAKE SETTING

☐ Near Bottom ☐ Near Top ☐ Other
Depth in feet (BTOC): Screen Interval in Feet (BTOC) from to

PURGE VOLUME CALCULATION

(12.21 TD (feet) - 8.65 WL (feet)) X 3 D (inches) ^{2} X 4 # Vols X 0.0408 = 5.22 gallons
Calculated Purge Volume

PURGE TIME / PURGE RATE / ACTUAL PURGE VOLUME

17:08 Start 17:14 Stop 6 Elapsed
Initial 1 gpm Final 1 gpm
6 gallons

FIELD PARAMETER MEASUREMENT

~~Minutes~~ Gals Since Pumping Began	pH	Cond. (µmhos/cm)	T ☐ °C ☒ °F	Other Turb
Initial	3.56	5500	73.4	light black
1	3.37	5470	73.4	silty
2	3.11	5430	73.2	
4	2.82	5490	73.1	
6	2.79	5460	73.1	

Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☐ °C ☐ °F	Other
Meter Nos.				

Observations During Purging (Well Condition, Turbidity, Color, Odor): Strong H2S odor
Discharge Water Disposal: ☐ Sanitary Sewer ☐ Storm Sewer ☒ Other On-site treatment

WELL SAMPLING

SAMPLING METHOD

☒ Bailer - Type: Disposable
☐ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:
☐ Same As Above
☐ Grab - Type:
☐ Other - Type:

SAMPLING DISTRIBUTION

Sample Series:

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab	Comments
MW-1	5-40ml	8010/8015/8020 8260	HCL	Del Mar	@ 17:21

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.

Other Samples

Type	Sample No.

Harding Lawson Associates
Engineering and
Environmental Services

GROUND-WATER SAMPLING FORM

Job Name G.W. College

Job Number

Recorded by _____ (Signature)

Well No. MW-2

Well Type: ☒ Monitor ☐ Extraction ☐ Other

Well Material: ☒ PVC ☐ St. Steel ☐ Other

Date 7/30/99 Time 16:30

Sampled by G.A. (Initials)

WELL PURGING

PURGE VOLUME

Casing Diameter (D in inches):
☐ 2-inch ☐ 4-inch ☐ 6-inch ☐ Other

Total Depth of Casing (TD in feet BTOC): 23.55

Water Level Depth (WL in feet BTOC): 8.85

Number of Well Volumes to be purged (# Vols)
☐ 3 ☒ 4 ☐ 5 ☐ 10 ☐ Other

PURGE METHOD

☐ Bailer - Type:
☒ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:
☐ Other - Type: Whale

PUMP INTAKE SETTING

☐ Near Bottom ☐ Near Top ☐ Other
Depth in feet (BTOC): _____ Screen Interval in Feet (BTOC) from _____ to _____

PURGE VOLUME CALCULATION:

(2355 (TD feet) - 8.85 (WL feet)) X 4 (D inches) ^{2} X .4 (# Vols) X 0.0408 = 38.38 gallons (Calculated Purge Volume)

PURGE TIME

16:31 Start 16:53 Stop 22 Elapsed

PURGE RATE

Initial 2.0 gpm Final 1.5 gpm

ACTUAL PURGE VOLUME

39 gallons

FIELD PARAMETER MEASUREMENT

Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☐ °C ☒ °F	Other Turb
Initial	8.30	4200	72.7	clear
5	7.86	4530	72.1	
10	7.7	4520	71.8	
15	7.63	4460	71.6	
20	7.57	4320	71.0	

Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☐ °C ☐ °F	Other Turb
25	7.49	4260	70.9	clear
30	7.46	4110	70.7	
35	7.41	4050	70.4	
39	7.39	4020	70.3	
Meter Nos.				

Observations During Purging (Well Condition, Turbidity, Color, Odor):

Discharge Water Disposal: ☐ Sanitary Sewer ☐ Storm Sewer ☐ Other On-site disposal

WELL SAMPLING

SAMPLING METHOD

☒ Bailer - Type: Disposable
☐ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:

☐ Same As Above
☐ Grab - Type:
☐ Other - Type:

SAMPLING DISTRIBUTION

Sample Series:

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab	Comments
MW-2	5-4oz/	8010/8015/8020	HCL	Del Mar	@ 16:59
		8260			

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.

Other Samples

Type	Sample No.

Harding Lawson Associates
Engineering and
Environmental Services

GROUND-WATER SAMPLING FORM

Job Name Golden West College

Job Number

Recorded by (Signature)

Well No. MW-4

Well Type: ☒ Monitor ☐ Extraction ☐ Other

Well Material: ☒ PVC ☐ St. Steel ☐ Other

Date 7/30/99 Time 14:08

Sampled by GD (Initials)

WELL PURGING

PURGE VOLUME

Casing Diameter (D in inches):
☐ 2-inch ☒ 4-inch ☐ 6-inch ☐ Other

Total Depth of Casing (TD in feet BTOC): 20.28

Water Level Depth (WL in feet BTOC): 8.83

Number of Well Volumes to be purged (# Vols)
☐ 3 ☒ 4 ☐ 5 ☐ 10 ☐ Other

PURGE METHOD

☐ Bailer - Type:
☒ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:
☐ Other - Type: Whale

PUMP INTAKE SETTING

☐ Near Bottom ☐ Near Top ☐ Other
Depth in feet (BTOC): Screen Interval in Feet (BTOC) from to

PURGE VOLUME CALCULATION:

(20.28 TD (feet) - 8.83 WL (feet)) X 4 D (inches) ^{2} X 4 # Vols X 0.0408 = 29.89 gallons Calculated Purge Volume

PURGE TIME

14:13 Start 14:33 Stop 20 Elapsed

PURGE RATE

Initial 1.5 gpm Final 1.5 gpm

ACTUAL PURGE VOLUME

30 gallons

FIELD PARAMETER MEASUREMENT

~~Minutes~~ Cont. Since Pumping Began	pH	Cond. (µmhos/cm)	T ☐ °C ☒ °F	Other Turb
Initial	9.05	820	73.4	clear
5	8.82	880	73.1	↓
10	8.42	950	72.4	
15	8.16	1020	70.9	
20	7.94	2010	71.4	

Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☐ °C ☐ °F	Other Turb
25	7.91	2030	71.5	clear
30	7.89	2050	71.7	↓
Meter Nos.				

Observations During Purging (Well Condition, Turbidity, Color, Odor):

Discharge Water Disposal: ☐ Sanitary Sewer ☐ Storm Sewer ☐ Other Onsite treatment

WELL SAMPLING

SAMPLING METHOD

☒ Bailer - Type: Disposable
☐ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:

☐ Same As Above
☐ Grab - Type:
☐ Other - Type:

SAMPLING DISTRIBUTION

Sample Series:

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab	Comments
MW-4	5-40ml	8010/8015/8020	HCL	Bel Mar	@ 14:40
		8260			

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.

Other Samples

Type	Sample No.

Harding Lawson Associates
Engineering and
Environmental Services

GROUND-WATER SAMPLING FORM

Job Name Golden West College

Job Number

Recorded by (Signature)

Well No. MW-5

Well Type: ☒ Monitor ☐ Extraction ☐ Other

Well Material: ☒ PVC ☐ St. Steel ☐ Other

Date 7/30/99 Time 11:45

Sampled by (Initials)

WELL PURGING

PURGE VOLUME

Casing Diameter (D in inches):
☐ 2-inch ☒ 4-inch ☐ 6-inch ☐ Other

Total Depth of Casing (TD in feet BTOC): ~~20.80~~ 18.04

Water Level Depth (WL in feet BTOC): 8.65

Number of Well Volumes to be purged (# Vols)
☐ 3 ☒ 4 ☐ 5 ☐ 10 ☐ Other

PURGE METHOD

☐ Bailer - Type:
☐ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:
☐ Other - Type:

PUMP INTAKE SETTING

☐ Near Bottom ☐ Near Top ☐ Other
Depth in feet (BTOC): Screen Interval in Feet (BTOC) from to

PURGE VOLUME CALCULATION:

(~~20.80~~ 18.04 (TD feet) - 8.65 (WL feet)) X 4 (D inches)^2 X 4 (# Vols) X 0.0408 = ~~30.42~~ 24.51 gallons (Calculated Purge Volume)

PURGE TIME

11:50 Start 12:10 Stop 15 Elapsed

PURGE RATE

Initial 1.6 gpm Final 1.6 gpm

ACTUAL PURGE VOLUME

25 gallons

FIELD PARAMETER MEASUREMENT

~~Minutes~~ Since Pumping Began	pH	Cond. (µmhos/cm)	T ☐ °C ☐ °F	Other ____
Initial	7.74	4270	75.8	Brown
5	7.46	4250	75.1	
10	7.46	4250	75.1	
15	7.4	4190	75.1	
20	7.34	4110	75.0	

Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☐ °C ☐ °F	Other ____
25	7.31	3990	75.1	Brown
~~30~~				
Meter Nos.	Hydac			

Observations During Purging (Well Condition, Turbidity, Color, Odor):

Discharge Water Disposal: ☐ Sanitary Sewer ☐ Storm Sewer ☐ Other On-site treatment

WELL SAMPLING

SAMPLING METHOD

☒ Bailer - Type: disposable
☐ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:

☐ Same As Above
☐ Grab - Type:
☐ Other - Type:

SAMPLING DISTRIBUTION

Sample Series:

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab	Comments
MW-5	5-40ml	8010/8018/8020	HCL	Del Mar	@ 12:18
		8260			

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.

Other Samples

Type	Sample No.

Harding Lawson Associates
Engineering and Environmental Services

GROUND-WATER SAMPLING FORM

Job Name G.W. College
Job Number
Recorded by (Signature)

Well No. MW-6
Well Type: ☒ Monitor ☐ Extraction ☐ Other
Well Material: ☒ PVC ☐ St. Steel ☐ Other
Date 7/30/99 Time 15:30
Sampled by GD (Initials)

WELL PURGING

PURGE VOLUME

Casing Diameter (D in inches):
☐ 2-inch ☒ 4-inch ☐ 6-inch ☐ Other
Total Depth of Casing (TD in feet BTOC): 20.30
Water Level Depth (WL in feet BTOC): 8.48
Number of Well Volumes to be purged (# Vols)
☐ 3 ☒ 4 ☐ 5 ☐ 10 ☐ Other

PURGE METHOD

☐ Bailer - Type:
☒ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:
☐ Other - Type: Whale

PUMP INTAKE SETTING

☐ Near Bottom ☐ Near Top ☐ Other
Depth in feet (BTOC): Screen Interval in Feet (BTOC) from to

PURGE VOLUME CALCULATION:

(20.30 TD (feet) - 8.48 WL (feet)) X 4 D (inches)^2 X 4 # Vols X 0.0408 = 30.86 gallons
Calculated Purge Volume

PURGE TIME

15:34 Start / 15:55 Stop 21 Elapsed

PURGE RATE

Initial 1.5 gpm Final 1.5 gpm

ACTUAL PURGE VOLUME

31.50 gallons

FIELD PARAMETER MEASUREMENT

Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☐ °C ☐ °F	Other Turb
Initial	7.73	5070	72.4	clear
5	7.63	5110	72.3	
10	7.67	5140	72.3	
15	7.71	5200	72.4	
20	7.70	5210	72.4	

Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☐ °C ☐ °F	Other Turb
25	7.66	5190	72.5	clear
30	7.63	5180	72.4	"
Meter Nos.				

Observations During Purging (Well Condition, Turbidity, Color, Odor):
Discharge Water Disposal: ☐ Sanitary Sewer ☐ Storm Sewer ☒ Other On-site treatment

WELL SAMPLING

SAMPLING METHOD

☒ Bailer - Type: Disposable
☐ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:
☐ Same As Above
☐ Grab - Type:
☐ Other - Type:

SAMPLING DISTRIBUTION

Sample Series:

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab	Comments
MW-6	5-40ml	8010/8015/8020	HCL	Del Mar	@ 16:00
		8260			

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.

Other Samples

Type	Sample No.

Harding Lawson Associates
Engineering and
Environmental Services

GROUND-WATER SAMPLING FORM

Job Name Golden West College

Job Number

Recorded by (Signature)

Well No. MW-7

Well Type: ☒ Monitor ☐ Extraction ☐ Other

Well Material: ☒ PVC ☐ St. Steel ☐ Other

Date 7/30/99 Time 14:45

Sampled by C.D. (Initials)

WELL PURGING

PURGE VOLUME

Casing Diameter (D in inches):
☐ 2-inch ☒ 4-inch ☐ 6-inch ☐ Other

Total Depth of Casing (TD in feet BTOC): 20.30

Water Level Depth (WL in feet BTOC): 8.67

Number of Well Volumes to be purged (# Vols)
☐ 3 ☒ 4 ☐ 5 ☐ 10 ☐ Other

PURGE METHOD

☐ Bailer - Type:
☒ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:
☐ Other - Type: Whale

PUMP INTAKE SETTING

☐ Near Bottom ☐ Near Top ☐ Other
Depth in feet (BTOC): Screen Interval in Feet (BTOC) from to

PURGE VOLUME CALCULATION:

(20.3 TD (feet) - 8.67 WL (feet)) X 4 D (inches) ^{2} X 4 # Vols X 0.0408 = 30.36 gallons
Calculated Purge Volume

PURGE TIME

14:54 Start 15:15 Stop 21 Elapsed

PURGE RATE

Initial 1.5 gpm Final gpm

ACTUAL PURGE VOLUME

31.5 gallons

FIELD PARAMETER MEASUREMENT

~~Minutes~~ Gals Since Pumping Began	pH	Cond. (µmhos/cm)	T ☐ °C ☒ °F	Other Turb
Initial	7.13	5030	72.1	Yellowish
5	7.01	4980	72.2	
10	7.19	4910	72.1	
15	7.24	4780	72.3	
20	7.27	4690	72.3	

Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☐ °C ☒ °F	Other Turb
25	7.34	4670	72.3	Yellowish
30	7.39	4590	72.4	
32	7.37	4530	72.4	
Meter Nos.				

Observations During Purging (Well Condition, Turbidity, Color, Odor): Milky Yellow

Discharge Water Disposal: ☐ Sanitary Sewer ☐ Storm Sewer ☒ Other On-site treatment

WELL SAMPLING

SAMPLING METHOD

☒ Bailer - Type: Disposable
☐ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:

☐ Same As Above
☐ Grab - Type:
☐ Other - Type:

SAMPLING DISTRIBUTION

Sample Series:

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab	Comments
MW-7	5-40 ml	8010/8015/8020	HCl	Del Mar	@15:22
		8260			

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.

Other Samples

Type	Sample No.

Harding Lawson Associates
Engineering and
Environmental Services

GROUND-WATER SAMPLING FORM

Job Name G.W. College

Job Number

Recorded by (Signature)

Well No. MW-8

Well Type: ☒ Monitor ☐ Extraction ☐ Other

Well Material: ☒ PVC ☐ St. Steel ☐ Other

Date 7/30/99 Time 17:41

Sampled by E.D. (Initials)

WELL PURGING

PURGE VOLUME

Casing Diameter (D in inches):
☐ 2-inch ☒ 4-inch ☐ 6-inch ☐ Other

Total Depth of Casing (TD in feet BTOC): 20.25

Water Level Depth (WL in feet BTOC): 8.9

Number of Well Volumes to be purged (# Vols)
☐ 3 ☒ 4 ☐ 5 ☐ 10 ☐ Other

PURGE METHOD

☐ Bailer - Type:
☒ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:
☐ Other - Type: Whale

PUMP INTAKE SETTING

☐ Near Bottom ☐ Near Top ☐ Other
Depth in feet (BTOC): Screen Interval in Feet (BTOC) from to

PURGE VOLUME CALCULATION:

$(20.25 - 8.9) \times 4^2 \times 4 \times 0.0408 = 29.64$ gallons

(TD (feet) − WL (feet)) × D (inches)² × # Vols × 0.0408 = Calculated Purge Volume

PURGE TIME

17:46 Start 18:06 Stop 20 Elapsed

PURGE RATE

Initial 1.5 gpm Final 1.5 gpm

ACTUAL PURGE VOLUME

30 gallons

FIELD PARAMETER MEASUREMENT

Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☐ °C ☒ °F	Other Turb
Initial	7.08	3500	71.1	Dk Gray
5	6.55	3290	71.4	4 silty
10	6.64	3120	72.0	
15	6.72	3040	71.9	
20	6.77	3170	72.0	

Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☐ °C ☐ °F	Other Turb
25	6.84	3140	72.0	5 / fg black
30	6.87	3150	72.1	1
Meter Nos.				

Observations During Purging (Well Condition, Turbidity, Color, Odor): Strong gas odor

Discharge Water Disposal: ☐ Sanitary Sewer ☐ Storm Sewer ☒ Other On-site treatment

WELL SAMPLING

SAMPLING METHOD

☒ Bailer - Type: Disposable

☐ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:

☐ Same As Above
☐ Grab - Type:
☐ Other - Type:

SAMPLING DISTRIBUTION

Sample Series:

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab	Comments
MW-8	5-40 ml	8010/8015/8020	HCL	Cal Mar	@ 18:12
		8260			

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.
MW-8	MW-8X
	@ 18:25

Blank Samples

Type	Sample No.
Equipment Blank	MW-30
	@ 18:40

Other Samples

Type	Sample No.

Harding Lawson Associates
Engineering and
Environmental Services

GROUND-WATER SAMPLING FORM

Job Name Golden West College

Job Number

Recorded by (Signature)

Well No. MW-9

Well Type: ☒ Monitor ☐ Extraction ☐ Other

Well Material: ☒ PVC ☐ St. Steel ☐ Other

Date 7/30/99 Time 9:47

Sampled by G.D. (Initials)

WELL PURGING

PURGE VOLUME

Casing Diameter (D in inches):
☐ 2-inch ☒ 4-inch ☐ 6-inch ☐ Other

Total Depth of Casing (TD in feet BTOC): 19.93

Water Level Depth (WL in feet BTOC): 7.88

Number of Well Volumes to be purged (# Vols)
☐ 3 ☒ 4 ☐ 5 ☐ 10 ☐ Other

PURGE METHOD

☐ Bailer - Type:
☒ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:
☐ Other - Type: Whale

PUMP INTAKE SETTING

☐ Near Bottom ☐ Near Top ☐ Other
Depth in feet (BTOC): Screen Interval in Feet (BTOC) from to

PURGE VOLUME CALCULATION:

$$\left(\frac{19.93}{\text{TD (feet)}} - \frac{7.88}{\text{WL (feet)}}\right) \times \frac{4}{\text{D (inches)}}^2 \times \frac{4}{\text{\# Vols}} \times 0.0408 = \frac{31.46}{\text{Calculated Purge Volume}} \text{ gallons}$$

PURGE TIME

10:10 Start 10:26 Stop 16 Elapsed

PURGE RATE

Initial 2 gpm Final 2 gpm

ACTUAL PURGE VOLUME

32 gallons

FIELD PARAMETER MEASUREMENT

Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☐ °C ☒ °F	Other Turb
Initial	9.8	4420	71.9	Black
5	9.4	4020	71.3	
10	8.7	4050	70	
15	8.6	4020	70	
20	8.4	3990	70	

Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☐ °C ☐ °F	Other Turb
25	8.3	4010	69.9	Black
30	8.2	4000	69.9	
32	8.1	3990	69.8	
Meter Nos.				

Observations During Purging (Well Condition, Turbidity, Color, Odor): Top of casing is cracked

Discharge Water Disposal: ☐ Sanitary Sewer ☐ Storm Sewer ☒ Other On Site treatment

WELL SAMPLING

SAMPLING METHOD

☑ Bailer - Type: Disposable
☐ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:

☐ Same As Above
☐ Grab - Type:
☐ Other - Type:

SAMPLING DISTRIBUTION

Sample Series:

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab	Comments
MW-9	5-40ml VOA	8010/8015	HCl	Del Mar	@ 10:31
		8020/8260			

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.

Other Samples

Type	Sample No.

Harding Lawson Associates
Engineering and
Environmental Services

GROUND-WATER SAMPLING FORM

Job Name Golden West College
Job Number
Recorded by [signature] (Signature)

Well No. MW-10
Well Type: ☒ Monitor ☐ Extraction ☐ Other
Well Material: ☒ PVC ☐ St. Steel ☐ Other
Date 7/30/99 Time 11:00
Sampled by [initials] (Initials)

WELL PURGING

PURGE VOLUME

Casing Diameter (D in inches):
☐ 2-inch ☒ 4-inch ☐ 6-inch ☐ Other
Total Depth of Casing (TD in feet BTOC): 18.66
Water Level Depth (WL in feet BTOC): 9.94
Number of Well Volumes to be purged (# Vols)
☐ 3 ☒ 4 ☐ 5 ☐ 10 ☐ Other

PURGE METHOD

☐ Bailer - Type:
☒ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:
☐ Other - Type: Whale

PUMP INTAKE SETTING

☐ Near Bottom ☐ Near Top ☐ Other
Depth in feet (BTOC): Screen Interval in Feet (BTOC) from to

PURGE VOLUME CALCULATION:

(18.66 - 9.94) X 2 ^{2} X 4 X 0.0408 = 6.01 gallons
TD (feet) WL (feet) D (inches) # Vols Calculated Purge Volume

PURGE TIME

11:15 Start 12:27 Stop 12 Elapsed

PURGE RATE

Initial .5 gpm Final .5 gpm

ACTUAL PURGE VOLUME

6 gallons

FIELD PARAMETER MEASUREMENT

~~Minutes~~ Gal Since Pumping Began	pH	Cond. (µmhos/cm)	T ☐ °C ☒ °F	Other Turb
Initial	7.64	1840	72.1	Clear silty
1	7.59	1910	72.0	↓
2	7.61	1870	72.1	
4	7.54	1840	72.2	
6	7.50	1870	72.2	

Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☐ °C ☐ °F	Other
Meter Nos.				

Observations During Purging (Well Condition, Turbidity, Color, Odor):
Discharge Water Disposal: ☐ Sanitary Sewer ☐ Storm Sewer ☒ Other On-site treatment

WELL SAMPLING

SAMPLING METHOD

☒ Bailer - Type: Disposable
☐ Submersible ☐ Centrifugal ☐ Bladder; Pump No.:
☐ Same As Above
☐ Grab - Type:
☐ Other - Type:

SAMPLING DISTRIBUTION

Sample Series:

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab	Comments
X-MW-10	5-40ml	8010/8015/8020	HCL	DelMar	@ 11:30
		8260			

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.

Other Samples

Type	Sample No.

Harding Lawson Associates
Engineering and
Environmental Services

GROUND-WATER SAMPLING FORM

Job Name Golden West College

Job Number _____

Recorded by _____ (Signature)

Well No. OW-1

Well Type: ☒ Monitor ☐ Extraction ☐ Other _____

Well Material: ☒ PVC ☐ St. Steel ☐ Other _____

Date 7/30/99 Time 1:35

Sampled by G.D. (Initials)

WELL PURGING

PURGE VOLUME

Casing Diameter (D in inches):
☒ 2-inch ☐ 4-inch ☐ 6-inch ☐ Other _____

Total Depth of Casing (TD in feet BTOC): 12.41

Water Level Depth (WL in feet BTOC): 8.7

Number of Well Volumes to be purged (# Vols)
☐ 3 ☒ 4 ☐ 5 ☐ 10 ☐ Other _____

PURGE METHOD

☐ Bailer - Type: _____
☒ Submersible ☐ Centrifugal ☐ Bladder; Pump No.: _____
☐ Other - Type: whale

PUMP INTAKE SETTING

☐ Near Bottom ☐ Near Top ☐ Other _____
Depth in feet (BTOC): _____ Screen Interval in Feet (BTOC) from _____ to _____

PURGE VOLUME CALCULATION:

$(12.41 \text{ (TD)} - 8.7 \text{ (WL)}) \times 2^2 \text{ (D)} \times 4 \text{ (\# Vols)} \times 0.0408 = 2.42$ gallons (Calculated Purge Volume)

PURGE TIME

13:41 Start 13:46 Stop 5 Elapsed

PURGE RATE

Initial .5 gpm Final .5 gpm

ACTUAL PURGE VOLUME

2.5 gallons

FIELD PARAMETER MEASUREMENT

~~Minutes~~ Since Pumping Began	pH	Cond. (µmhos/cm)	T ☐ °C ☐ °F	Other Turb
Initial	7.7	5820	72.1	Blackish
# .5	7.3	4590	72.1	↓
# 1	7.29	4470	72.1	↓
# 1.5	7.31	4310	72.0	clearing
# 2.0	7.29	4250	72.2	↓

Minutes Since Pumping Began	pH	Cond. (µmhos/cm)	T ☐ °C ☐ °F	Other Turb.
2.5	7.31	4230	72.2	light black
Meter Nos.				

Observations During Purging (Well Condition, Turbidity, Color, Odor): _____

Discharge Water Disposal: ☐ Sanitary Sewer ☐ Storm Sewer ☒ Other On-site treatment

WELL SAMPLING

SAMPLING METHOD

☒ Bailer - Type: Disposable
☐ Submersible ☐ Centrifugal ☐ Bladder; Pump No.: _____

☐ Same As Above
☐ Grab - Type: _____
☐ Other - Type: _____

SAMPLING DISTRIBUTION

Sample Series: _____

Sample No.	Volume/Cont.	Analysis Requested	Preservatives	Lab	Comments
OW-1	5-40ml	8010/8015/8020	HCL	Del Mar	@ 13:53
		8260			

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.

Other Samples

Type	Sample No.

WATER LEVEL DATA SHEET

INSTRUMENT/MODEL # : YSI 100

PROJECT: Golden West College

JOB NUMBER: 31447-22.2

NAME: Garey D.

DATE: 7/30/99

SHEET 1 OF 1

WELL NUMBER	TIME	DEPTH TO WATER 1st READING	DEPTH TO WATER 2nd READING	DEPTH TO WATER 3rd READING	COMMENTS SECTION
MW-9	8:54	7.88			
MW-10	9:02	9.94			
MW-5	9:06	8.65			
MW-4	9:14	8.83			
OW-1	9:11	8.7			
MW-7	9:16	8.67			
MW-6	9:19	8.48			
MW-2	9:22	8.85			
MW-1	9:26	8.65			
MW-8	9:28	8.9			

APPENDIX C

DEL MAR ANALYTICAL LABORATORY REPORTS

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
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9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-1338

LABORATORY REPORT

Prepared For: Harding Lawson Associates
30 Corporate Park, Suite 400
Irvine, CA 92606

Attention: Lynn Flanigan
Project: 31447-22.2
Goldenwest College

Sampled: 7/30/99
Received: 7/31/99
Reported: 8/10/99

This laboratory report is confidential and is intended for the sole use of Del Mar Analytical and its client. This entire report was reviewed and approved for release.

CA ELAP Certificate #1197
AZ DHS Licence #AZ0428

DEL MAR ANALYTICAL

Michele Harper
Project Manager

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-1338

Harding Lawson Associates
30 Corporate Park, Suite 400
Irvine, CA 92606
Attention: Lynn Flanigan

Client Project ID: 31447-22.2
Goldenwest College
Sample Descript: Water, MW-9
Lab Number: IH00028
QC Batch: IH03101W

Sampled: 7/30/99
Received: 7/31/99
Extracted: 8/3/99
Analyzed: 8/3/99
Reported: 8/10/99

HALOGENATED VOLATILE ORGANICS by GC (EPA 5030/8010)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon tetrachloride	0.50	N.D.
Chlorobenzene	1.0	N.D.
Chloroethane	2.5	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	1.0	N.D.
1,3-Dichlorobenzene	1.0	N.D.
1,4-Dichlorobenzene	1.0	N.D.
Dichlorodifluoromethane	1.0	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	10	N.D.
1,1,1,2-Tetrachloroethane	0.50	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	1.0	N.D.
Vinyl Chloride	1.0	N.D.

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)
Michele Harper
Project Manager

Surrogate Standard Recovery (Accept. Limits):	
1-Chloro-3-fluorobenzene (80-120).	109%

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-1338

Harding Lawson Associates
30 Corporate Park, Suite 400
Irvine, CA 92606
Attention: Lynn Flanigan

Client Project ID: 31447-22.2
Goldenwest College
Sample Descript: Water, MW-10
Lab Number: IH00029
QC Batch: IH03101W

Sampled: 7/30/99
Received: 7/31/99
Extracted: 8/3/99
Analyzed: 8/3/99
Reported: 8/10/99

HALOGENATED VOLATILE ORGANICS by GC (EPA 5030/8010)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon tetrachloride	0.50	N.D.
Chlorobenzene	1.0	N.D.
Chloroethane	2.5	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	1.0	N.D.
1,3-Dichlorobenzene	1.0	N.D.
1,4-Dichlorobenzene	1.0	N.D.
Dichlorodifluoromethane	1.0	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	10	N.D.
1,1,1,2-Tetrachloroethane	0.50	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	1.0	N.D.
Vinyl Chloride	1.0	N.D.

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)
Michele Harper
Project Manager

Surrogate Standard Recovery (Accept. Limits):	
1-Chloro-3-fluorobenzene (80-120).	108%

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9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-1338

Harding Lawson Associates	Client Project ID: 31447-22.2	Sampled: 7/30/99
30 Corporate Park, Suite 400	Goldenwest College	Received: 7/31/99
Irvine, CA 92606	Sample Descript: Water, MW-5	Extracted: 8/3/99
Attention: Lynn Flanigan	Lab Number: IH00030	Analyzed: 8/3/99
	QC Batch: IH03101W	Reported: 8/10/99

HALOGENATED VOLATILE ORGANICS by GC (EPA 5030/8010)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon tetrachloride	0.50	N.D.
Chlorobenzene	1.0	N.D.
Chloroethane	2.5	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	1.0	N.D.
1,3-Dichlorobenzene	1.0	N.D.
1,4-Dichlorobenzene	1.0	N.D.
Dichlorodifluoromethane	1.0	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	**0.50**	**0.62**
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	10	N.D.
1,1,1,2-Tetrachloroethane	0.50	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	1.0	N.D.
Vinyl Chloride	1.0	N.D.

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)
Michele Harper
Project Manager

Surrogate Standard Recovery (Accept. Limits):	
1-Chloro-3-fluorobenzene (80-120).	97%

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-1338

Harding Lawson Associates
30 Corporate Park, Suite 400
Irvine, CA 92606
Attention: Lynn Flanigan

Client Project ID: 31447-22.2
Goldenwest College
Sample Descript: Water, OW-1
Lab Number: IH00031
QC Batch: IH03101W

Sampled: 7/30/99
Received: 7/31/99
Extracted: 8/3/99
Analyzed: 8/3/99
Reported: 8/10/99

HALOGENATED VOLATILE ORGANICS by GC (EPA 5030/8010)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon tetrachloride	0.50	N.D.
Chlorobenzene	1.0	N.D.
Chloroethane	2.5	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	1.0	N.D.
1,3-Dichlorobenzene	1.0	N.D.
1,4-Dichlorobenzene	1.0	N.D.
Dichlorodifluoromethane	1.0	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	10	N.D.
1,1,1,2-Tetrachloroethane	0.50	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	1.0	N.D.
Vinyl Chloride	1.0	N.D.

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)
Michele Harper
Project Manager

Surrogate Standard Recovery (Accept. Limits):	
1-Chloro-3-fluorobenzene (80-120).	107%

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-1338

Harding Lawson Associates	Client Project ID: 31447-22.2	Sampled: 7/30/99
30 Corporate Park, Suite 400	Goldenwest College	Received: 7/31/99
Irvine, CA 92606	Sample Descript: Water, MW-4	Extracted: 8/3/99
Attention: Lynn Flanigan	Lab Number: IH00032	Analyzed: 8/3/99
	QC Batch: IH03101W	Reported: 8/10/99

HALOGENATED VOLATILE ORGANICS by GC (EPA 5030/8010)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon tetrachloride	0.50	N.D.
Chlorobenzene	1.0	N.D.
Chloroethane	2.5	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	1.0	N.D.
1,3-Dichlorobenzene	1.0	N.D.
1,4-Dichlorobenzene	1.0	N.D.
Dichlorodifluoromethane	1.0	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	**0.50**	**2.8**
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	10	N.D.
1,1,1,2-Tetrachloroethane	0.50	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	1.0	N.D.
Vinyl Chloride	1.0	N.D.

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)
Michele Harper
Project Manager

Surrogate Standard Recovery (Accept. Limits):	
1-Chloro-3-fluorobenzene (80-120).	109%

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Harding Lawson Associates
30 Corporate Park, Suite 400
Irvine, CA 92606
Attention: Lynn Flanigan

Client Project ID: 31447-22.2
Goldenwest College
Sample Descript: Water, MW-7
Lab Number: IH00033
QC Batch: IH03101W

Sampled: 7/30/99
Received: 7/31/99
Extracted: 8/3/99
Analyzed: 8/3/99
Reported: 8/10/99

HALOGENATED VOLATILE ORGANICS by GC (EPA 5030/8010)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon tetrachloride	0.50	N.D.
Chlorobenzene	1.0	N.D.
Chloroethane	2.5	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	1.0	N.D.
1,3-Dichlorobenzene	1.0	N.D.
1,4-Dichlorobenzene	1.0	N.D.
Dichlorodifluoromethane	1.0	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	**0.50**	**14**
trans-1,2-Dichloroethene	**0.50**	**4.7**
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	10	N.D.
1,1,1,2-Tetrachloroethane	0.50	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	**0.50**	**16**
Trichlorofluoromethane	1.0	N.D.
Vinyl Chloride	1.0	N.D.

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)
Michele Harper
Project Manager

Surrogate Standard Recovery (Accept. Limits):	
1-Chloro-3-fluorobenzene (80-120).	105%

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-1338

Harding Lawson Associates	Client Project ID:	31447-22.2	Sampled: 7/30/99
30 Corporate Park, Suite 400		Goldenwest College	Received: 7/31/99
Irvine, CA 92606	Sample Descript:	Water, MW-6	Extracted: 8/3/99
Attention: Lynn Flanigan	Lab Number:	IH00034	Analyzed: 8/3/99
	QC Batch:	IH03101W	Reported: 8/10/99

HALOGENATED VOLATILE ORGANICS by GC (EPA 5030/8010)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon tetrachloride	0.50	N.D.
Chlorobenzene	1.0	N.D.
Chloroethane	2.5	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	1.0	N.D.
1,3-Dichlorobenzene	1.0	N.D.
1,4-Dichlorobenzene	1.0	N.D.
Dichlorodifluoromethane	1.0	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	**0.50**	**9.9**
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	10	N.D.
1,1,1,2-Tetrachloroethane	0.50	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	**0.50**	**27**
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	**0.50**	**29**
Trichlorofluoromethane	1.0	N.D.
Vinyl Chloride	1.0	N.D.

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)
Michele Harper
Project Manager

Surrogate Standard Recovery (Accept. Limits):	
1-Chloro-3-fluorobenzene (80-120).	108%

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-1338

Harding Lawson Associates	Client Project ID: 31447-22.2	Sampled: 7/30/99
30 Corporate Park, Suite 400	Goldenwest College	Received: 7/31/99
Irvine, CA 92606	Sample Descript: Water, MW-2	Extracted: 8/3/99
Attention: Lynn Flanigan	Lab Number: IH00035	Analyzed: 8/3/99
	QC Batch: IH03101W	Reported: 8/10/99

HALOGENATED VOLATILE ORGANICS by GC (EPA 5030/8010)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	1.0	N.D.
Bromoform	1.0	N.D.
Bromomethane	2.0	N.D.
Carbon tetrachloride	1.0	N.D.
Chlorobenzene	2.0	N.D.
Chloroethane	5.0	N.D.
Chloroform	1.0	N.D.
Chloromethane	2.0	N.D.
Dibromochloromethane	1.0	N.D.
1,2-Dichlorobenzene	2.0	N.D.
1,3-Dichlorobenzene	2.0	N.D.
1,4-Dichlorobenzene	2.0	N.D.
Dichlorodifluoromethane	2.0	N.D.
1,1-Dichloroethane	1.0	N.D.
1,2-Dichloroethane	1.0	N.D.
1,1-Dichloroethene	1.0	N.D.
cis-1,2-Dichloroethene	**1.0**	**25**
trans-1,2-Dichloroethene	**1.0**	**2.1**
1,2-Dichloropropane	1.0	N.D.
cis-1,3-Dichloropropene	1.0	N.D.
trans-1,3-Dichloropropene	1.0	N.D.
Methylene chloride	20	N.D.
1,1,1,2-Tetrachloroethane	1.0	N.D.
1,1,2,2-Tetrachloroethane	1.0	N.D.
Tetrachloroethene	**1.0**	**20**
1,1,1-Trichloroethane	1.0	N.D.
1,1,2-Trichloroethane	1.0	N.D.
Trichloroethene	**1.0**	**48**
Trichlorofluoromethane	2.0	N.D.
Vinyl Chloride	2.0	N.D.

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 2.

DEL MAR ANALYTICAL (ELAP #1197)
Michele Harper
Project Manager

Surrogate Standard Recovery (Accept. Limits):	
1-Chloro-3-fluorobenzene (80-120).	106%

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-1338

Harding Lawson Associates	Client Project ID: 31447-22.2	Sampled: 7/30/99
30 Corporate Park, Suite 400	Goldenwest College	Received: 7/31/99
Irvine, CA 92606	Sample Descript: Water, MW-1	Extracted: 8/3/99
Attention: Lynn Flanigan	Lab Number: IH00036	Analyzed: 8/3/99
	QC Batch: IH03101W	Reported: 8/10/99

HALOGENATED VOLATILE ORGANICS by GC (EPA 5030/8010)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	10	N.D.
Chloroethane	25	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	10	N.D.
1,3-Dichlorobenzene	10	N.D.
1,4-Dichlorobenzene	10	N.D.
Dichlorodifluoromethane	10	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	100	N.D.
1,1,1,2-Tetrachloroethane	5.0	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	10	N.D.
Vinyl Chloride	10	N.D.

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 10.

DEL MAR ANALYTICAL (ELAP #1197)
Michele Harper
Project Manager

Surrogate Standard Recovery (Accept. Limits):	
1-Chloro-3-fluorobenzene (80-120).	104%

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-1338

Harding Lawson Associates
30 Corporate Park, Suite 400
Irvine, CA 92606
Attention: Lynn Flanigan

Client Project ID: 31447-22.2
Goldenwest College
Sample Descript: Water, MW-8
Lab Number: IH00037
QC Batch: IH03101W

Sampled: 7/30/99
Received: 7/31/99
Extracted: 8/3/99
Analyzed: 8/3/99
Reported: 8/10/99

HALOGENATED VOLATILE ORGANICS by GC (EPA 5030/8010)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	13	N.D.
Bromoform	13	N.D.
Bromomethane	25	N.D.
Carbon tetrachloride	13	N.D.
Chlorobenzene	25	N.D.
Chloroethane	63	N.D.
Chloroform	13	N.D.
Chloromethane	25	N.D.
Dibromochloromethane	13	N.D.
1,2-Dichlorobenzene	25	N.D.
1,3-Dichlorobenzene	25	N.D.
1,4-Dichlorobenzene	25	N.D.
Dichlorodifluoromethane	25	N.D.
1,1-Dichloroethane	13	N.D.
1,2-Dichloroethane	13	N.D.
1,1-Dichloroethene	13	N.D.
cis-1,2-Dichloroethene	13	N.D.
trans-1,2-Dichloroethene	13	N.D.
1,2-Dichloropropane	13	N.D.
cis-1,3-Dichloropropene	13	N.D.
trans-1,3-Dichloropropene	13	N.D.
Methylene chloride	250	N.D.
1,1,1,2-Tetrachloroethane	13	N.D.
1,1,2,2-Tetrachloroethane	13	N.D.
Tetrachloroethene	13	N.D.
1,1,1-Trichloroethane	13	N.D.
1,1,2-Trichloroethane	13	N.D.
Trichloroethene	13	N.D.
Trichlorofluoromethane	25	N.D.
Vinyl Chloride	25	N.D.

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 25.

DEL MAR ANALYTICAL (ELAP #1197)
Michele Harper
Project Manager

Surrogate Standard Recovery (Accept. Limits):	
1-Chloro-3-fluorobenzene (80-120).	107%

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-1338

Harding Lawson Associates	Client Project ID: 31447-22.2	Sampled: 7/30/99
30 Corporate Park, Suite 400	Goldenwest College	Received: 7/31/99
Irvine, CA 92606	Sample Descript: Water, MW-8X	Extracted: 8/4/99
Attention: Lynn Flanigan	Lab Number: IH00038	Analyzed: 8/4/99
	QC Batch: IH04231W	Reported: 8/10/99

HALOGENATED VOLATILE ORGANICS by GC (EPA 5030/8010)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	25	N.D.
Bromoform	25	N.D.
Bromomethane	50	N.D.
Carbon tetrachloride	25	N.D.
Chlorobenzene	50	N.D.
Chloroethane	130	N.D.
Chloroform	25	N.D.
Chloromethane	50	N.D.
Dibromochloromethane	25	N.D.
1,2-Dichlorobenzene	50	N.D.
1,3-Dichlorobenzene	50	N.D.
1,4-Dichlorobenzene	50	N.D.
Dichlorodifluoromethane	50	N.D.
1,1-Dichloroethane	25	N.D.
1,2-Dichloroethane	25	N.D.
1,1-Dichloroethene	25	N.D.
cis-1,2-Dichloroethene	25	N.D.
trans-1,2-Dichloroethene	25	N.D.
1,2-Dichloropropane	25	N.D.
cis-1,3-Dichloropropene	25	N.D.
trans-1,3-Dichloropropene	25	N.D.
Methylene chloride	500	N.D.
1,1,1,2-Tetrachloroethane	25	N.D.
1,1,2,2-Tetrachloroethane	25	N.D.
Tetrachloroethene	25	N.D.
1,1,1-Trichloroethane	25	N.D.
1,1,2-Trichloroethane	25	N.D.
Trichloroethene	25	N.D.
Trichlorofluoromethane	50	N.D.
Vinyl Chloride	50	N.D.

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 50.

DEL MAR ANALYTICAL (ELAP #1197)
Michele Harper
Project Manager

Surrogate Standard Recovery (Accept. Limits):	
1-Chloro-3-fluorobenzene (80-120).	107%

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Harding Lawson Associates
30 Corporate Park, Suite 400
Irvine, CA 92606
Attention: Lynn Flanigan

Client Project ID: 31447-22.2
Goldenwest College
Sample Descript: Water, MW-30
Lab Number: IH00039
QC Batch: IH03101W

Sampled: 7/30/99
Received: 7/31/99
Extracted: 8/3/99
Analyzed: 8/3/99
Reported: 8/10/99

HALOGENATED VOLATILE ORGANICS by GC (EPA 5030/8010)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon tetrachloride	0.50	N.D.
Chlorobenzene	1.0	N.D.
Chloroethane	2.5	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	1.0	N.D.
1,3-Dichlorobenzene	1.0	N.D.
1,4-Dichlorobenzene	1.0	N.D.
Dichlorodifluoromethane	1.0	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	10	N.D.
1,1,1,2-Tetrachloroethane	0.50	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	1.0	N.D.
Vinyl Chloride	1.0	N.D.

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)
Michele Harper
Project Manager

Surrogate Standard Recovery (Accept. Limits):	
1-Chloro-3-fluorobenzene (80-120).	102%

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Harding Lawson Associates
30 Corporate Park, Suite 400
Irvine, CA 92606
Attention: Lynn Flanigan

Client Project ID: 31447-22.2
Goldenwest College
Sample Descript: Water, Trip Blank
Lab Number: IH00040
QC Batch: IH03101W

Sampled: 7/30/99
Received: 7/31/99
Extracted: 8/3/99
Analyzed: 8/3/99
Reported: 8/10/99

HALOGENATED VOLATILE ORGANICS by GC (EPA 5030/8010)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon tetrachloride	0.50	N.D.
Chlorobenzene	1.0	N.D.
Chloroethane	2.5	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	1.0	N.D.
1,3-Dichlorobenzene	1.0	N.D.
1,4-Dichlorobenzene	1.0	N.D.
Dichlorodifluoromethane	1.0	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	10	N.D.
1,1,1,2-Tetrachloroethane	0.50	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	1.0	N.D.
Vinyl Chloride	1.0	N.D.

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)
Michele Harper
Project Manager

Surrogate Standard Recovery (Accept. Limits):	
1-Chloro-3-fluorobenzene (80-120).	101%

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Harding Lawson Associates
30 Corporate Park, Suite 400
Irvine, CA 92606
Attention: Lynn Flanigan

Client Project ID: 31447-22.2
Goldenwest College
Analysis Method: EPA 5030/CA DHS Mod. 8015B/8021B
First Sample #: IH00028

Sampled: 7/30/99
Received: 7/31/99
Extracted: 8/3/99
Analyzed: 8/3/99
Reported: 8/10/99

VOLATILE FUEL HYDROCARBONS/BTEX DISTINCTION (CA DHS Mod. EPA 8015B/8021B)

Laboratory Number QC Batch	Sample Description Water	Volatile Fuel Hydrocarbons µg/L (ppb)	Benzene µg/L (ppb)	Toluene µg/L (ppb)	Ethyl Benzene µg/L (ppb)	Total Xylenes µg/L (ppb)
IH00028 IH03151W	**MW-9**	**N.D.**	**N.D.**	**0.78**	**N.D.**	**N.D.**
Dilution: 1.0	Reporting Limit:	50	0.30	0.30	0.30	0.60
IH00029 IH03151W	**MW-10**	**N.D.**	**N.D.**	**5.2**	**N.D.**	**N.D.**
Dilution: 1.0	Reporting Limit:	50	0.30	0.30	0.30	0.60
IH00030 IH03151W	**MW-5**	**N.D.**	**N.D.**	**0.52**	**N.D.**	**N.D.**
Dilution: 1.0	Reporting Limit:	50	0.30	0.30	0.30	0.60
IH00031 IH03151W	**OW-1**	**250**	**2.1**	**2.9**	**N.D.**	**N.D.**
Dilution: 1.0	Reporting Limit:	50	0.30	0.30	0.30	0.60
IH00032 IH03151W	**MW-4**	**N.D.**	**0.59**	**0.57**	**N.D.**	**N.D.**
Dilution: 1.0	Reporting Limit:	50	0.30	0.30	0.30	0.60
IH00033 IH03151W	**MW-7**	**180**	**4.4**	**4.5**	**N.D.**	**N.D.**
Dilution: 1.0	Reporting Limit:	50	0.30	0.30	0.30	0.60

Volatile Fuel Hydrocarbons are quantitated against a gasoline standard. Hydrocarbons detected by this method range from C6 to C12.
Analytes reported as N.D. were not present at or above the reporting limit. Dilution factors are due to matrix effects and other factors.

DEL MAR ANALYTICAL (ELAP #1197)
Michele Harper
Project Manager

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Harding Lawson Associates
30 Corporate Park, Suite 400
Irvine, CA 92606
Attention: Lynn Flanigan

Client Project ID: 31447-22.2
Goldenwest College
Analysis Method: EPA 5030/CA DHS Mod. 8015B/8021B
First Sample #: IH00034

Sampled: 7/30/99
Received: 7/31/99
Extracted: 8/3/99
Analyzed: 8/3/99
Reported: 8/10/99

VOLATILE FUEL HYDROCARBONS/BTEX DISTINCTION (CA DHS Mod. EPA 8015B/8021B)

Laboratory Number QC Batch	Sample Description Water	Volatile Fuel Hydrocarbons µg/L (ppb)	Benzene µg/L (ppb)	Toluene µg/L (ppb)	Ethyl Benzene µg/L (ppb)	Total Xylenes µg/L (ppb)
IH00034 IH03151W	**MW-6**	**N.D.**	**N.D.**	**1.3**	**N.D.**	**N.D.**
Dilution: 1.0	Reporting Limit:	50	0.30	0.30	0.30	0.60
IH00035 IH03151W	**MW-2**	**N.D.**	**N.D.**	**N.D.**	**N.D.**	**N.D.**
Dilution: 1.0	Reporting Limit:	50	0.30	0.30	0.30	0.60
IH00036 IH03151W	**MW-1**	**9,300**	**30**	**N.D.**	**1,400**	**290**
Dilution: 100	Reporting Limit:	5,000	30	30	30	60
IH00037 IH03151W	**MW-8**	**22,000**	**240**	**110**	**2,000**	**3,000**
Dilution: 100	Reporting Limit:	5,000	30	30	30	60
IH00038 IH03151W	**MW-8X**	**24,000**	**300**	**140**	**2,400**	**3,700**
Dilution: 50	Reporting Limit:	2,500	15	15	15	30
IH00039 IH03151W	**MW-30**	**N.D.**	**N.D.**	**N.D.**	**2.2**	**5.5**
Dilution: 1.0	Reporting Limit:	50	0.30	0.30	0.30	0.60

Volatile Fuel Hydrocarbons are quantitated against a gasoline standard. Hydrocarbons detected by this method range from C6 to C12.
Analytes reported as N.D. were not present at or above the reporting limit. Dilution factors are due to matrix effects and other factors.

DEL MAR ANALYTICAL (ELAP #1197)
Michele Harper
Project Manager

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Harding Lawson Associates
30 Corporate Park, Suite 400
Irvine, CA 92606
Attention: Lynn Flanigan

Client Project ID: 31447-22.2
Goldenwest College
Analysis Method: EPA 5030/CA DHS Mod. 8015B/8021B
First Sample #: IH00040

Sampled: 7/30/99
Received: 7/31/99
Extracted: 8/3/99
Analyzed: 8/3/99
Reported: 8/10/99

VOLATILE FUEL HYDROCARBONS/BTEX DISTINCTION (CA DHS Mod. EPA 8015B/8021B)

Laboratory Number QC Batch	Sample Description Water	Volatile Fuel Hydrocarbons µg/L (ppb)	Benzene µg/L (ppb)	Toluene µg/L (ppb)	Ethyl Benzene µg/L (ppb)	Total Xylenes µg/L (ppb)
IH00040	**Trip Blank**	**N.D.**	**N.D.**	**N.D.**	**N.D.**	**N.D.**
IH03151W						
Dilution: 1.0	Reporting Limit:	50	0.30	0.30	0.30	0.60

Volatile Fuel Hydrocarbons are quantitated against a gasoline standard. Hydrocarbons detected by this method range from C6 to C12. Analytes reported as N.D. were not present at or above the reporting limit. Dilution factors are due to matrix effects and other factors.

DEL MAR ANALYTICAL (ELAP #1197)
Michele Harper
Project Manager

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-1338

Harding Lawson Associates	Client Project ID: 31447-22.2	Sampled: 7/30/99
30 Corporate Park, Suite 400	Goldenwest College	Received: 7/31/99
Irvine, CA 92606	Sample Descript: Water, MW-9	Extracted: 8/3/99
Attention: Lynn Flanigan	Lab Number: IH00028	Analyzed: 8/3/99
	QC Batch: IH03012W	Reported: 8/10/99

MTBE (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Methyl tert-Butyl Ether	5.0	N.D.

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)
Michele Harper
Project Manager

Surrogate Standard Recovery (Accept. Limits):	
Dibromofluoromethane (86-118).....	97%

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Harding Lawson Associates	Client Project ID: 31447-22.2	Sampled: 7/30/99
30 Corporate Park, Suite 400	Goldenwest College	Received: 7/31/99
Irvine, CA 92606	Sample Descript: Water, MW-10	Extracted: 8/3/99
Attention: Lynn Flanigan	Lab Number: IH00029	Analyzed: 8/3/99
	QC Batch: IH03012W	Reported: 8/10/99

MTBE (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Methyl tert-Butyl Ether.....	5.0	N.D.

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)
Michele Harper
Project Manager

Surrogate Standard Recovery (Accept. Limits):	
Dibromofluoromethane (86-118).....	98%

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Harding Lawson Associates	Client Project ID: 31447-22.2	Sampled: 7/30/99
30 Corporate Park, Suite 400	Goldenwest College	Received: 7/31/99
Irvine, CA 92606	Sample Descript: Water, MW-5	Extracted: 8/3/99
Attention: Lynn Flanigan	Lab Number: IH00030	Analyzed: 8/3/99
	QC Batch: IH03012W	Reported: 8/10/99

MTBE (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Methyl tert-Butyl Ether	5.0	N.D.

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)
Michele Harper
Project Manager

Surrogate Standard Recovery (Accept. Limits):	
Dibromofluoromethane (86-118).....	98%

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-1338

Harding Lawson Associates	Client Project ID: 31447-22.2	Sampled: 7/30/99
30 Corporate Park, Suite 400	Goldenwest College	Received: 7/31/99
Irvine, CA 92606	Sample Descript: Water, OW-1	Extracted: 8/3/99
Attention: Lynn Flanigan	Lab Number: IH00031	Analyzed: 8/3/99
	QC Batch: IH03012W	Reported: 8/10/99

MTBE (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Methyl tert-Butyl Ether	5.0	N.D.

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)
Michele Harper
Project Manager

Surrogate Standard Recovery (Accept. Limits):	
Dibromofluoromethane (86-118).....	95%

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-1338

Harding Lawson Associates	Client Project ID: 31447-22.2	Sampled: 7/30/99
30 Corporate Park, Suite 400	Goldenwest College	Received: 7/31/99
Irvine, CA 92606	Sample Descript: Water, MW-4	Extracted: 8/3/99
Attention: Lynn Flanigan	Lab Number: IH00032	Analyzed: 8/3/99
	QC Batch: IH03012W	Reported: 8/10/99

MTBE (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Methyl tert-Butyl Ether	5.0	18

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)
Michele Harper
Project Manager

Surrogate Standard Recovery (Accept. Limits):	
Dibromofluoromethane (86-118).....	100%

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Harding Lawson Associates	Client Project ID: 31447-22.2	Sampled: 7/30/99
30 Corporate Park, Suite 400	Goldenwest College	Received: 7/31/99
Irvine, CA 92606	Sample Descript: Water, MW-7	Extracted: 8/3/99
Attention: Lynn Flanigan	Lab Number: IH00033	Analyzed: 8/3/99
	QC Batch: IH03012W	Reported: 8/10/99

MTBE (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Methyl tert-Butyl Ether	5.0	N.D.

Analytes reported as N.D. were not present at or above the reporting limit.

Surrogate Standard Recovery (Accept. Limits):	
Dibromofluoromethane (86-118).....	97%

DEL MAR ANALYTICAL (ELAP #1197)
Michele Harper
Project Manager

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Harding Lawson Associates	Client Project ID: 31447-22.2	Sampled: 7/30/99
30 Corporate Park, Suite 400	Goldenwest College	Received: 7/31/99
Irvine, CA 92606	Sample Descript: Water, MW-6	Extracted: 8/3/99
Attention: Lynn Flanigan	Lab Number: IH00034	Analyzed: 8/3/99
	QC Batch: IH03012W	Reported: 8/10/99

MTBE (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Methyl tert-Butyl Ether.....	5.0	N.D.

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)
Michele Harper
Project Manager

Surrogate Standard Recovery (Accept. Limits):	
Dibromofluoromethane (86-118).....	96%

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-1338

Harding Lawson Associates	Client Project ID: 31447-22.2	Sampled: 7/30/99
30 Corporate Park, Suite 400	Goldenwest College	Received: 7/31/99
Irvine, CA 92606	Sample Descript: Water, MW-2	Extracted: 8/3/99
Attention: Lynn Flanigan	Lab Number: IH00035	Analyzed: 8/3/99
	QC Batch: IH03012W	Reported: 8/10/99

MTBE (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Methyl tert-Butyl Ether	5.0	N.D.

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)
Michele Harper
Project Manager

Surrogate Standard Recovery (Accept. Limits):	
Dibromofluoromethane (86-118).....	99%

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-1338

Harding Lawson Associates	Client Project ID: 31447-22.2	Sampled: 7/30/99
30 Corporate Park, Suite 400	Goldenwest College	Received: 7/31/99
Irvine, CA 92606	Sample Descript: Water, MW-1	Extracted: 8/3/99
Attention: Lynn Flanigan	Lab Number: IH00036	Analyzed: 8/3/99
	QC Batch: IH03012W	Reported: 8/10/99

MTBE (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Methyl tert-Butyl Ether.....	13	N.D.

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 2.5.

DEL MAR ANALYTICAL (ELAP #1197)
Michele Harper
Project Manager

Surrogate Standard Recovery (Accept. Limits):	
Dibromofluoromethane (86-118).....	100%

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Harding Lawson Associates	Client Project ID: 31447-22.2	Sampled: 7/30/99
30 Corporate Park, Suite 400	Goldenwest College	Received: 7/31/99
Irvine, CA 92606	Sample Descript: Water, MW-8	Extracted: 8/3/99
Attention: Lynn Flanigan	Lab Number: IH00037	Analyzed: 8/3/99
	QC Batch: IH03012W	Reported: 8/10/99

MTBE (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Methyl tert-Butyl Ether	25	330

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 5.

DEL MAR ANALYTICAL (ELAP #1197)
Michele Harper
Project Manager

Surrogate Standard Recovery (Accept. Limits):	
Dibromofluoromethane (86-118).....	94%

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Harding Lawson Associates	Client Project ID: 31447-22.2	Sampled: 7/30/99
30 Corporate Park, Suite 400	Goldenwest College	Received: 7/31/99
Irvine, CA 92606	Sample Descript: Water, MW-8X	Extracted: 8/4/99
Attention: Lynn Flanigan	Lab Number: IH00038	Analyzed: 8/4/99
	QC Batch: IH03012W	Reported: 8/10/99

MTBE (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Methyl tert-Butyl Ether.....	25	370

Analytes reported as N.D. were not present at or above the reporting limit. Due to matrix effects and/or other factors, the sample required dilution. Reporting limits for this sample have been raised by a factor of 5.

DEL MAR ANALYTICAL (ELAP #1197)
Michele Harper
Project Manager

Surrogate Standard Recovery (Accept. Limits):	
Dibromofluoromethane (86-118).....	96%

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-1338

Harding Lawson Associates	Client Project ID: 31447-22.2	Sampled: 7/30/99
30 Corporate Park, Suite 400	Goldenwest College	Received: 7/31/99
Irvine, CA 92606	Sample Descript: Water, MW-30	Extracted: 8/4/99
Attention: Lynn Flanigan	Lab Number: IH00039	Analyzed: 8/4/99
	QC Batch: IH03012W	Reported: 8/10/99

MTBE (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Methyl tert-Butyl Ether.....	5.0	N.D.

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)
Michele Harper
Project Manager

Surrogate Standard Recovery (Accept. Limits):	
Dibromofluoromethane (86-118).....	97%

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Harding Lawson Associates
30 Corporate Park, Suite 400
Irvine, CA 92606
Attention: Lynn Flanigan

Method Blank

QC Batch: IH03101W

Extracted: 8/3/99
Analyzed: 8/3/99
Reported: 8/10/99

HALOGENATED VOLATILE ORGANICS by GC (EPA 5030/8010)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon tetrachloride	0.50	N.D.
Chlorobenzene	1.0	N.D.
Chloroethane	2.5	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	1.0	N.D.
1,3-Dichlorobenzene	1.0	N.D.
1,4-Dichlorobenzene	1.0	N.D.
Dichlorodifluoromethane	1.0	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	10	N.D.
1,1,1,2-Tetrachloroethane	0.50	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	1.0	N.D.
Vinyl Chloride	1.0	N.D.

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)
Michele Harper
Project Manager

Surrogate Standard Recovery (Accept. Limits):	
1-Chloro-3-fluorobenzene (80-120).	105%

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-1338

Harding Lawson Associates
30 Corporate Park, Suite 400
Irvine, CA 92606
Attention: Lynn Flanigan

Method Blank

QC Batch: IH04231W

Extracted: 8/4/99
Analyzed: 8/4/99
Reported: 8/10/99

HALOGENATED VOLATILE ORGANICS by GC (EPA 5030/8010)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon tetrachloride	0.50	N.D.
Chlorobenzene	1.0	N.D.
Chloroethane	2.5	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	1.0	N.D.
1,3-Dichlorobenzene	1.0	N.D.
1,4-Dichlorobenzene	1.0	N.D.
Dichlorodifluoromethane	1.0	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	10	N.D.
1,1,1,2-Tetrachloroethane	0.50	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	1.0	N.D.
Vinyl Chloride	1.0	N.D.

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)
Michele Harper
Project Manager

Surrogate Standard Recovery (Accept. Limits):	
1-Chloro-3-fluorobenzene (80-120).	104%

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-1338

Harding Lawson Associates
30 Corporate Park, Suite 400
Irvine, CA 92606
Attention: Lynn Flanigan

Method Blank

Extracted: 8/3/99
Analyzed: 8/3/99
Reported: 8/10/99

VOLATILE FUEL HYDROCARBONS/BTEX DISTINCTION (CA DHS Mod. EPA 8015B/8021B)

QC Batch	Sample Description	Volatile Fuel Hydrocarbons µg/L (ppb)	Benzene µg/L (ppb)	Toluene µg/L (ppb)	Ethyl Benzene µg/L (ppb)	Total Xylenes µg/L (ppb)
IH03151W	**Method Blank**	**N.D.**	**N.D.**	**N.D.**	**N.D.**	**N.D.**
Dilution: 1.0	Reporting Limit	50	0.30	0.30	0.30	0.60

Volatile Fuel Hydrocarbons are quantitated against a gasoline standard. Hydrocarbons detected by this method range from C6 to C12. Analytes reported as N.D. were not present at or above the reporting limit. Dilution factors are due to matrix effects and other factors.

DEL MAR ANALYTICAL (ELAP #1197)
Michele Harper
Project Manager

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Harding Lawson Associates
30 Corporate Park, Suite 400
Irvine, CA 92606
Attention: Lynn Flanigan

Method Blank

QC Batch: IH03012W

Extracted: 8/3/99
Analyzed: 8/3/99
Reported: 8/10/99

MTBE (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Methyl tert-Butyl Ether.....	5.0	N.D.

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)
Michele Harper
Project Manager

Surrogate Standard Recovery (Accept. Limits):	
Dibromofluoromethane (86-118).....	97%

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9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

MS/MSD DATA REPORT

EPA Method 8010/8020

Matrix: Water

Date: 08/03/99

Sample #: IH00028

Batch #: IH03101W

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Mean PR	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	%	RPD	Mean PR
Benzene	0	10	10	11	103	109	5.7	106	≤30	75 - 115
Chloroform	0	10	11	11	110	114	3.6	112	≤30	80 - 125
1,1-Dichloroethane	0	10	11	11	111	114	2.3	112	≤30	80 - 120
1,2-Dichloroethane	0	10	11	12	112	116	3.4	114	≤30	80 - 125
1,1-Dichloroethene	0	10	12	12	117	121	3.5	119	≤30	75 - 120
Tetrachloroethene	0.047	10	11	12	108	115	6.5	112	≤30	70 - 130
Toluene	1.1	10	11	12	103	108	4.1	106	≤30	70 - 130
Trichloroethene	0	10	11	11	110	109	1.1	110	≤30	50 - 140

Definition of Terms

R1..... Result of Sample Analysis
Sp..... Spike Concentration added to sample
MS..... Matrix Spike Result
MSD..... Matrix Spike Duplicate Result
PR1..... Percent Recovery of MS; ((MS-R1)/SP) X 100
PR2..... Percent Recovery of MSD; ((MSD-R1)/SP) X 100
RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2) X 100
Mean PR..... Mean Percent Recovery
Acceptance Limits..... Determined by EPA Method 8010/8020

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MS/MSD DATA REPORT

EPA Method 8010/8020

Matrix: Water

Date: 08/04/99

Sample #: IH0189

Batch #: IH04231W

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Mean PR	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	%	RPD	Mean PR
Benzene	0	10	10	10	104	104	0.18	104	≤30	75 - 115
Chloroform	0	10	10	10	104	104	0.52	104	≤30	80 - 125
1,1-Dichloroethane	0	10	9.5	9.3	95	93	2.1	94	≤30	80 - 120
1,2-Dichloroethane	0	10	10	9.9	104	99	4.7	101	≤30	80 - 125
1,1-Dichloroethene	0	10	11	11	111	109	1.6	110	≤30	75 - 120
Tetrachloroethene	0	10	11	11	108	107	0.59	107	≤30	70 - 130
Toluene	0.36	10	11	11	103	103	0.32	103	≤30	70 - 130
Trichloroethene	0.40	10	11	12	110	115	3.9	112	≤30	50 - 140

Definition of Terms

R1..... Result of Sample Analysis
Sp..... Spike Concentration added to sample
MS..... Matrix Spike Result
MSD..... Matrix Spike Duplicate Result
PR1..... Percent Recovery of MS; ((MS-R1)/SP) X 100
PR2..... Percent Recovery of MSD; ((MSD-R1)/SP) X 100
RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2) X 100
Mean PR..... Mean Percent Recovery
Acceptance Limits..... Determined by EPA Method 8010/8020

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MS/MSD DATA REPORT

Date: 08/03/99

EPA Method 8015B/8021B

Sample #: IH00028 Matrix: Water

Batch #: IH03151W

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Mean PR	Acceptance Limits	
	µg/L	µg/L	µg/L	µg/L	%	%	%	%	RPD	Mean PR
TPH	9.4	220	267	240	117	105	11	111	≤20	65 - 130
Benzene	0.0	20	20	20	99	101	1.3	100	≤20	75 - 120
Toluene	0.78	20	19	19	92	92	0.10	92	≤20	75 - 120
Ethylbenzene	0.0	20	20	20	101	99	1.6	100	≤20	80 - 125
Xylenes	0.0	60	59	58	99	97	1.7	98	≤20	80 - 120
MTBE	0.0	300	300	368	100	123	20	111	≤30	50 - 150

Definition of Terms

R1..... Result of Sample Analysis
Sp..... Spike Concentration added to sample
MS..... Matrix Spike Result
MSD..... Matrix Spike Duplicate Result
PR1..... Percent Recovery of MS; ((MS-R1)/SP) X 100
PR2..... Percent Recovery of MSD; ((MSD-R1)/SP) X 100
RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2) X 100
Mean PR..... Mean Percent Recovery
Acceptance Limits..... Determined by in-house Control Charts

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MS/MSD DATA REPORT

EPA METHOD: 8260B
Matrix: Water

Date Analyzed: 8/3/99

Sample: IH00028

Batch: IH03012W

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	MEAN PR	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	%	RPD	MPR
Vinyl Chloride	0	25	21	19	84%	76%	10%	80%	20	25-190
1,1-Dichloroethene	0	25	24	24	96%	96%	0%	96%	50	45-165
MTBE	0	25	29	31	116%	124%	6.7%	120%	25	60-150
1,1-Dichloroethane	0	25	25	25	100%	100%	0%	100%	20	55-160
Chloroform	0	25	25	26	100%	104%	3.9%	102%	20	60-150
1,2-Dichloroethane	0.1	25	28	29	112%	116%	3.5%	114%	20	40-160
Benzene	0	25	24	24	96%	96%	0%	96%	20	65-140
Trichloroethene	0	25	27	27	108%	108%	0%	108%	20	65-130
Toluene	1.4	25	27	27	102%	102%	0%	102%	20	70-135
Tetrachloroethene	0	25	28	27	112%	108%	3.6%	110%	20	50-155
Chlorobenzene	0	25	27	27	108%	108%	0%	108%	20	75-130
Ethylbenzene	0	25	27	27	108%	108%	0%	108%	20	70-135
m,p-Xylenes	0	50	54	54	108%	108%	0%	108%	20	65-140
o-Xylene	0	25	27	27	108%	108%	0%	108%	25	70-150

Definition of Terms:

R1..... Result of Sample Analysis
Sp..... Spike Concentration Added to Sample
MS..... Matrix Spike Result
MSD..... Matrix Spike Duplicate Result
PR1..... Percent Recovery of MS; ((MS-R1) / SP) X 100
PR2..... Percent Recovery of MSD; ((MSD-R1) / SP) X 100
RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2) X 100
Acceptance Limits..... Statistically determined on an annual basis.

DEL MAR ANALYTICAL

Harding Lawson Associates
30 Corporate Park, Suite 400
Irvine, CA 92606
(949) 260-1800

CHAIN OF CUSTODY FORM

Lab: Del Mar

Samplers: Greg DeLaTaz

Job Number: 31447-22.2

Name/Location: Golden West College

Project Manager: Lynn Flanigan

Recorder: (Signature Required)

SOURCE CODE	MATRIX: Water	Sediment	Soil	Oil	# CONTAINERS & PRESERV.: Unpres.	H_2SO_4	HNO_3	HCl	NaOH	SAMPLE NUMBER OR LAB NUMBER: Yr	Wk	Seq	DATE: Yr	Mo	Day	Time	STATION DESCRIPTION/ NOTES
23	X							5					99	07	30	1031	MW-9
23	X															1130	MW-10
23	X															1218	MW-5
23	X															1353	DW-1
23	X															1440	MW-4
23	X															1522	MW-7
23	X															1600	MW-6
23	X															1659	MW-2
23	X															1721	MW-1
23	X							▼					▼	▼	▼	1812	MW-8

ANALYSIS REQUESTED

EPA 418.1 TRPH	EPA 601/8010	EPA 602/8020	EPA 624/8240	EPA 625/8260 /MTBE	CAM METALS	EPA 8015M /TPHG	EPA 8015M (GAS)/8021 BTEX	EPA 8081	EPA 8082
	X	X		X		X			
	X	X		X		X			
	X	X		X		X			
	X	X		X		X			
	X	X		X		X			
	X	X		X		X			
	X	X		X		X			
	X	X		X		X			
	X	X		X		X			
	X	X		X		X			

LAB NUMBER: Yr	Wk	Seq	DEPTH IN FEET	COL MTD CD	QA CODE	MISCELLANEOUS
						Normal TAT

CHAIN OF CUSTODY RECORD

	DATE/TIME		DATE/TIME
RELINQUISHED BY: (Signature)	7/31/99 12:45	RECEIVED BY: (Signature)	
RELINQUISHED BY: (Signature)		RECEIVED BY: (Signature)	
RELINQUISHED BY: (Signature)		RECEIVED BY: (Signature)	
RELINQUISHED BY: (Signature)		RECEIVED BY: (Signature)	
DISPATCHED BY: (Signature)		RECEIVED FOR LAB BY: (Signature)	7-31-99 12:45

METHOD OF SHIPMENT: Courier / Cool

Laboratory Copy White | Project Office Copy Yellow | Field or Office Copy Pink

Harding Lawson Associates
30 Corporate Park, Suite 400
Irvine, CA 92606
(949) 260-1800

CHAIN OF CUSTODY FORM

Lab: Del Mar

Samplers: Greg DeLa Paz

Job Number: 31447-22.2

Name/Location: Golden West College

Project Manager: Lynn Flanigan

Recorder: [signature] (Signature Required)

SOURCE CODE	MATRIX: Water	Sediment	Soil	Oil	# CONTAINERS & PRESERV.: Unpres.	H_2SO_4	HNO_3	HCl	NaOH	SAMPLE NUMBER OR LAB NUMBER: Yr	Wk	Seq	DATE: Yr	Mo	Day	Time	STATION DESCRIPTION/ NOTES	ANALYSIS REQUESTED: EPA 418.1 TRPH	EPA 601/8010	EPA 602/8020	EPA 624/8240	EPA 625/8260 MTBE	CAM METALS	EPA 8015M TPHG	EPA 8015M (GAS)/8021 BTEX	EPA 8081	EPA 8082
23	X							5					990730	1825			MW-8X		X	X		X		X			
23	X							5					990730	1840			MW-30		X	X		X		X			
10	Y							5					990730	—			Trip Blank		X	X				X			

LAB NUMBER: Yr	Wk	Seq	DEPTH IN FEET	COL MTD CD	QA CODE	MISCELLANEOUS
						Normal TAT

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	DATE/TIME
[signature]	7/31/99 12:45		
[signature]			
DISPATCHED BY: (Signature)	DATE/TIME	RECEIVED FOR LAB BY: (Signature)	DATE/TIME
		[signature]	7-31-99 12:40

METHOD OF SHIPMENT: Contract / Cod

Laboratory Copy White — Project Office Copy Yellow — Field or Office Copy Pink

Del Mar Analytical

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LABORATORY REPORT

Prepared For: Harding Lawson Associates
30 Corporate Park, Suite 400
Irvine, CA 92606

Attention: Lynn Flanigan
Project: 31447-22.2
Goldenwest College

Sampled: 7/30/99
Received: 7/31/99
Reported: 8/13/99

This laboratory report is confidential and is intended for the sole use of Del Mar Analytical and its client. This entire report was reviewed and approved for release.

CA ELAP Certificate #1197
AZ DHS Licence #AZ0428

DEL MAR ANALYTICAL

Michele Harper
Project Manager

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Harding Lawson Associates
30 Corporate Park, Suite 400
Irvine, CA 92606
Attention: Lynn Flanigan

Client Project ID: 31447-22.2
Goldenwest College
Sample Descript: Water, Effluent
Lab Number: IH00041
QC Batch: IH03101W

Sampled: 7/30/99
Received: 7/31/99
Extracted: 8/3/99
Analyzed: 8/3/99
Reported: 8/13/99

HALOGENATED VOLATILE ORGANICS by GC (EPA 5030/8010)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon tetrachloride	0.50	N.D.
Chlorobenzene	1.0	N.D.
Chloroethane	**2.5**	**5.9**
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	1.0	N.D.
1,3-Dichlorobenzene	1.0	N.D.
1,4-Dichlorobenzene	1.0	N.D.
Dichlorodifluoromethane	1.0	N.D.
1,1-Dichloroethane	**0.50**	**0.66**
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	10	N.D.
1,1,1,2-Tetrachloroethane	0.50	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	1.0	N.D.
Vinyl Chloride	1.0	N.D.

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)
Michele Harper
Project Manager

Surrogate Standard Recovery (Accept. Limits):	
1-Chloro-3-fluorobenzene (80-120).	101%

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Irvine, CA 92606
Attention: Lynn Flanigan

Client Project ID: 31447-22.2
Goldenwest College
Analysis Method: EPA 5030/CA DHS Mod. 8015B/8021B
First Sample #: IH00041

Sampled: 7/30/99
Received: 7/31/99
Extracted: 8/3/99
Analyzed: 8/3/99
Reported: 8/13/99

VOLATILE FUEL HYDROCARBONS/BTEX DISTINCTION (CA DHS Mod. EPA 8015B/8021B)

Laboratory Number QC Batch	Sample Description Water	Volatile Fuel Hydrocarbons µg/L (ppb)	Benzene µg/L (ppb)	Toluene µg/L (ppb)	Ethyl Benzene µg/L (ppb)	Total Xylenes µg/L (ppb)
IH00041 IH03151W	**Effluent**	**N.D.**	**N.D.**	**N.D.**	**N.D.**	**N.D.**
Dilution: 1.0	Reporting Limit:	50	0.30	0.30	0.30	0.60

Volatile Fuel Hydrocarbons are quantitated against a gasoline standard. Hydrocarbons detected by this method range from C6 to C12. Analytes reported as N.D. were not present at or above the reporting limit. Dilution factors are due to matrix effects and other factors.

DEL MAR ANALYTICAL (ELAP #1197)
Michele Harper
Project Manager

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Harding Lawson Associates
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Irvine, CA 92606
Attention: Lynn Flanigan

Client Project ID: 31447-22.2
Goldenwest College
Sample Descript: Water, Effluent
Lab Number: IH00041
QC Batch: IH03012W

Sampled: 7/30/99
Received: 7/31/99
Extracted: 8/4/99
Analyzed: 8/4/99
Reported: 8/13/99

MTBE (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Methyl tert-Butyl Ether.....	5.0	N.D.

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)
Michele Harper
Project Manager

Surrogate Standard Recovery (Accept. Limits):	
Dibromofluoromethane (86-118).....	97%

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Harding Lawson Associates
30 Corporate Park, Suite 400
Irvine, CA 92606
Attention: Lynn Flanigan

Method Blank

QC Batch: IH03101W

Extracted: 8/3/99
Analyzed: 8/3/99
Reported: 8/13/99

HALOGENATED VOLATILE ORGANICS by GC (EPA 5030/8010)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon tetrachloride	0.50	N.D.
Chlorobenzene	1.0	N.D.
Chloroethane	2.5	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	1.0	N.D.
1,3-Dichlorobenzene	1.0	N.D.
1,4-Dichlorobenzene	1.0	N.D.
Dichlorodifluoromethane	1.0	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	10	N.D.
1,1,1,2-Tetrachloroethane	0.50	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	1.0	N.D.
Vinyl Chloride	1.0	N.D.

Analytes reported as N.D. were not present at or above the reporting limit.

DEL MAR ANALYTICAL (ELAP #1197)
Michele Harper
Project Manager

Surrogate Standard Recovery (Accept. Limits):	
1-Chloro-3-fluorobenzene (80-120).	105%

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Harding Lawson Associates
30 Corporate Park, Suite 400
Irvine, CA 92606
Attention: Lynn Flanigan

Method Blank

Extracted: 8/3/99
Analyzed: 8/3/99
Reported: 8/13/99

VOLATILE FUEL HYDROCARBONS/BTEX DISTINCTION (CA DHS Mod. EPA 8015B/8021B)

QC Batch	Sample Description	Volatile Fuel Hydrocarbons µg/L (ppb)	Benzene µg/L (ppb)	Toluene µg/L (ppb)	Ethyl Benzene µg/L (ppb)	Total Xylenes µg/L (ppb)
IH03151W	**Method Blank**	**N.D.**	**N.D.**	**N.D.**	**N.D.**	**N.D.**
Dilution: 1.0	Reporting Limit	50	0.30	0.30	0.30	0.60

Volatile Fuel Hydrocarbons are quantitated against a gasoline standard. Hydrocarbons detected by this method range from C6 to C12. Analytes reported as N.D. were not present at or above the reporting limit. Dilution factors are due to matrix effects and other factors.

DEL MAR ANALYTICAL (ELAP #1197)
Michele Harper
Project Manager

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Harding Lawson Associates
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Irvine, CA 92606
Attention: Lynn Flanigan

Method Blank

QC Batch: IH03012W

Extracted: 8/3/99
Analyzed: 8/3/99
Reported: 8/13/99

MTBE (EPA 8260B)

Analyte	Reporting Limit µg/L (ppb)	Sample Result µg/L (ppb)
Methyl tert-Butyl Ether	5.0	N.D.

Analytes reported as N.D. were not present at or above the reporting limit.

Surrogate Standard Recovery (Accept. Limits):	
Dibromofluoromethane (86-118).....	97%

DEL MAR ANALYTICAL (ELAP #1197)
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Project Manager

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MS/MSD DATA REPORT

EPA Method 8010/8020

Matrix: Water

Date: 08/03/99

Sample #: IH00028

Batch #: IH03101W

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Mean PR	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	%	RPD	Mean PR
Benzene	0	10	10	11	103	109	5.7	106	≤30	75 - 115
Chloroform	0	10	11	11	110	114	3.6	112	≤30	80 - 125
1,1-Dichloroethane	0	10	11	11	111	114	2.3	112	≤30	80 - 120
1,2-Dichloroethane	0	10	11	12	112	116	3.4	114	≤30	80 - 125
1,1-Dichloroethene	0	10	12	12	117	121	3.5	119	≤30	75 - 120
Tetrachloroethene	0.047	10	11	12	108	115	6.5	112	≤30	70 - 130
Toluene	1.1	10	11	12	103	108	4.1	106	≤30	70 - 130
Trichloroethene	0	10	11	11	110	109	1.1	110	≤30	50 - 140

Definition of Terms

R1..... Result of Sample Analysis
Sp..... Spike Concentration added to sample
MS..... Matrix Spike Result
MSD..... Matrix Spike Duplicate Result
PR1..... Percent Recovery of MS; ((MS-R1)/SP) X 100
PR2..... Percent Recovery of MSD; ((MSD-R1)/SP) X 100
RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2) X 100
Mean PR..... Mean Percent Recovery
Acceptance Limits..... Determined by EPA Method 8010/8020

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MS/MSD DATA REPORT

Date: 08/03/99

EPA Method 8015B/8021B

Sample #: IH00028 Matrix: Water

Batch #: IH03151W

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	Mean PR	Acceptance Limits	
	µg/L	µg/L	µg/L	µg/L	%	%	%	%	RPD	Mean PR
TPH	9.4	220	267	240	117	105	11	111	≤20	65 - 130
Benzene	0.0	20	20	20	99	101	1.3	100	≤20	75 - 120
Toluene	0.78	20	19	19	92	92	0.10	92	≤20	75 - 120
Ethylbenzene	0.0	20	20	20	101	99	1.6	100	≤20	80 - 125
Xylenes	0.0	60	59	58	99	97	1.7	98	≤20	80 - 120
MTBE	0.0	300	300	368	100	123	20	111	≤30	50 - 150

Definition of Terms

R1..... Result of Sample Analysis
Sp..... Spike Concentration added to sample
MS..... Matrix Spike Result
MSD..... Matrix Spike Duplicate Result
PR1..... Percent Recovery of MS; ((MS-R1)/SP) X 100
PR2..... Percent Recovery of MSD; ((MSD-R1)/SP) X 100
RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2) X 100
Mean PR..... Mean Percent Recovery
Acceptance Limits..... Determined by in-house Control Charts

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MS/MSD DATA REPORT

EPA METHOD: 8260B
Matrix: Water

Date Analyzed: 8/3/99

Sample: IH00028

Batch: IH03012W

Analyte	R1	Sp	MS	MSD	PR1	PR2	RPD	MEAN PR	Acceptance Limits	
	ppb	ppb	ppb	ppb	%	%	%	%	RPD	MPR
Vinyl Chloride	0	25	21	19	84%	76%	10%	80%	20	25-190
1,1-Dichloroethene	0	25	24	24	96%	96%	0%	96%	50	45-165
MTBE	0	25	29	31	116%	124%	6.7%	120%	25	60-150
1,1-Dichloroethane	0	25	25	25	100%	100%	0%	100%	20	55-160
Chloroform	0	25	25	26	100%	104%	3.9%	102%	20	60-150
1,2-Dichloroethane	0.1	25	28	29	112%	116%	3.5%	114%	20	40-160
Benzene	0	25	24	24	96%	96%	0%	96%	20	65-140
Trichloroethene	0	25	27	27	108%	108%	0%	108%	20	65-130
Toluene	1.4	25	27	27	102%	102%	0%	102%	20	70-135
Tetrachloroethene	0	25	28	27	112%	108%	3.6%	110%	20	50-155
Chlorobenzene	0	25	27	27	108%	108%	0%	108%	20	75-130
Ethylbenzene	0	25	27	27	108%	108%	0%	108%	20	70-135
m,p-Xylenes	0	50	54	54	108%	108%	0%	108%	20	65-140
o-Xylene	0	25	27	27	108%	108%	0%	108%	25	70-150

Definition of Terms:

R1..... Result of Sample Analysis
Sp..... Spike Concentration Added to Sample
MS..... Matrix Spike Result
MSD..... Matrix Spike Duplicate Result
PR1..... Percent Recovery of MS; ((MS-R1) / SP) X 100
PR2..... Percent Recovery of MSD; ((MSD-R1) / SP) X 100
RPD..... Relative Percent Difference; ((MS-MSD)/(MS+MSD)/2) X 100
Acceptance Limits..... Statistically determined on an annual basis.

DEL MAR ANALYTICAL

Harding Lawson Associates
30 Corporate Park, Suite 400
Irvine, CA 92606
(949) 260-1800

CHAIN OF CUSTODY FORM

Lab: Del Mar

Samplers: Greg DeLaPaz

Job Number: 31447-22.2

Name/Location: Golden West College

Project Manager: Lynn Flanigan

Recorder: J. DLP (Signature Required)

SOURCE CODE	MATRIX: Water	Sediment	Soil	Oil	# CONTAINERS & PRESERV.: Unpres.	H_2SO_4	HNO_3	HCl	NaOH	SAMPLE NUMBER OR LAB NUMBER: Yr	Wk	Seq	DATE: Yr	Mo	Day	Time	STATION DESCRIPTION/ NOTES
30	X							X					99	07	30	1851	Effluent

ANALYSIS REQUESTED

EPA 418.1 TRPH	EPA 601/8010	EPA 602/8020	EPA 624/8240	EPA 625/8260/MTBE	CAM METALS	EPA 8015M/TPHg	EPA 8015M (GAS)/8021 BTEX	EPA 8081	EPA 8082
	X	X		X		X			

LAB NUMBER: Yr	Wk	Seq	DEPTH IN FEET	COL MTD CD	QA CODE	MISCELLANEOUS
						Normal TAT

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	DATE/TIME
J. DLP	7/31/99 12:45		
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	DATE/TIME
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	DATE/TIME
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	DATE/TIME
DISPATCHED BY: (Signature)	DATE/TIME	RECEIVED FOR LAB BY: (Signature)	DATE/TIME
			7-31-99 12:45
METHOD OF SHIPMENT		Hand Del/Cool	

Laboratory Copy White | Project Office Copy Yellow | Field or Office Copy Pink

APPENDIX D

SUMMARY OF REMEDIAL ACTIVITIES AT GOLDEN WEST COMMUNITY COLLEGE MAINTENANCE YARD

SUMMARY OF SITE REMEDIAL ACTIVITIES
AT THE GOLDEN WEST COMMUNITY COLLEGE MAINTENANCE YARD

BACKGROUND

In 1988, two 1,000-gallon gasoline underground storage tanks (USTs), formerly located on the northeast and southwest sides of the Site were excavated and removed. Applied Geosciences, Inc. (AGI) and Frey Environmental (Frey) conducted site investigations from 1988 through 1992. The results of the investigations indicated the presence of hydrocarbon-affected soil and groundwater on the east side of the site. Free hydrocarbon product (FHP) thicknesses up to approximately 3 feet were measured in Wells MW-01, MW-03, and MW-08. Elevated concentrations of total petroleum hydrocarbons (TPH) and benzene were detected in soil samples collected at approximately 10 feet below ground surface (bgs), the approximate depth to groundwater.

1988 through July, 1995:

- Ten groundwater monitoring wells (MW-01 through MW-10) were installed at the site. During initial investigations, groundwater was encountered at approximately 9.5 feet bgs, and groundwater flow direction was to the southwest. Free hydrocarbon product (FHP) with a thickness up to 3 feet was detected in three of the wells (MW-01, MW-03, and MW-08)

- Approximately 275 gallons of FHP were manually removed from MW-01, MW-03, and MW-08, reducing observable hydrocarbon presence to a sheen.

- A trench-style pump-and-treat groundwater remediation system (including Wells RW-1, RW-2, and OW-1) was installed in August 1991 and was operated through July 1995, extracting approximately 2,400,000 gallons of groundwater and 125 gallons of hydrocarbon product

- HLA conducted a 10-day vapor extraction test in 1994 to evaluate remedial options for the Site. Approximately 175 equivalent gallons of gasoline were recovered during the test.

August 1995 through September 1996:

- Approximately 2,060 cubic yards of petroleum hydrocarbon affected soil was removed to a depth of approximately 14 feet bgs (or 4 feet below water table) by excavation in August 1995. The completed excavation was approximately 120 feet long and 50 feet wide at the ground surface, and approximately 90 feet long and 20 feet wide at a depth of 14 feet bgs, the total depth excavated. The limits of the excavation extended to within approximately 10 feet of the existing USTs on the west side, to within approximately 10 feet of the building on the north and south sides, and to within approximately 5 feet of the fence, subsurface utilities, and grease interceptor on the east side and northeast corner of the maintenance yard.

- A layer of gravel was placed in the excavation during backfilling operations, at and below the groundwater level, and a drainage system was constructed within the gravel. Approximately 400,000 gallons of groundwater containing residual-phase hydrocarbons was purged from this gravel blanket from early 1996 through September 1996.

August 1995 through September 1996 (continued):

- Groundwater purging was discontinued in September 1996 because petroleum hydrocarbon levels in Well MW-07 and in the treatment system influent stream had reached asymptotic levels. Gravel blanket groundwater analytical results indicated that purging of the gravel blanket did not significantly lower concentrations of TPHg and BTEX remaining in groundwater, suggesting that additional groundwater extraction would have a negligible effect on residual dissolved-phase petroleum hydrocarbons.

October 1996 through June, 1999

- Active remediation (groundwater extraction and treatment) was discontinued because it been carried out to its feasible limits, as described above. Groundwater monitoring and sampling were continued on a quarterly basis through June 1999 (the date of this report). Monitoring and sampling data indicate that the residual concentrations of petroleum hydrocarbon constituents in groundwater beneath the site are stable or are naturally attenuating.

Soil Remediation
Golden West Community College Maintenance Yard
7112 McFadden Avenue
Huntington Beach, California

Prepared for

Coast Community College District
1370 Adams Avenue
Costa Mesa, California 92626

HLA Project No. 31447 12

Lynn M. Flanigan
Project Engineer

Kurt H. Wiebe, P.E.
Associate Engineer

April 5, 1996

Harding Lawson Associates
Engineering and Environmental Services
30 Corporate Park, Suite 400
Irvine, CA 92714 – (714) 260-1800

CONTENTS

1.0 INTRODUCTION 1

2.0 SITE BACKGROUND 2
- 2.1 Site Description and History 2
- 2.2 Subsurface Conditions 2
- 2.3 Remediation History 3

3.0 EXCAVATION ACTIVITIES 4
- 3.1 Participants 4
- 3.2 Preparation 4
- 3.3 Removal of Asphalt Pavement and Utilities 5
- 3.4 SCAQMD Rule 1166 Monitoring and Soil Segregation 5
- 3.5 Soil Sample Collection and Analysis 6
- 3.6 Conditions Encountered During Excavation 7
- 3.7 Excavation Limits 8
- 3.8 Construction of Subsurface Drain 8
- 3.9 Backfilling, Compaction, and Reconstruction of Maintenance Yard 9
- 3.10 Contaminated Soil Treatment and Treatment Pile Sampling 9
- 3.11 Borrow Site Backfill, Compaction, and Restoration 10

4.0 CONCLUSION 11

REFERENCES

TABLES

1 Summary of Soil Analytical Results - Excavation Sidewall and Bottom Sampling
2 Summary of Soil Analytical Results - Excavated Soil Stockpile Sampling
3 Summary of Soil Analytical Results - Treatment Stockpile Interim Sampling
4 Summary of Soil Analytical Results - Treatment Stockpile OCHCA Confirmation Sampling
5 Summary of Field Density Test Results - Maintenance Yard Excavation
6 Summary of Field Density Test Results - Borrow Area Excavation

DRAWINGS

G-1 Site Location Map/Site Vicinity Map
C-1 Area Map
C-2 Pre-Excavation Site Plan
C-3 Proposed Remedial Excavation Plan
C-4 Excavation Plan with Soil Sample Locations
C-5 Soil Stockpile Sample Locations
C-6 As-Built Site Plan
C-7 As-Built Sections and Details

APPENDIXES

A OCHCA CORRESPONDENCE
B BORROW AREA BORING LOGS
C PERMITS
D MANIFESTS
E LABORATORY REPORTS AND CHAINS-OF-CUSTODY

DISTRIBUTION

1.0 INTRODUCTION

This report was prepared by Harding Lawson Associates (HLA) to summarize soil remediation performed at the Golden West College Maintenance Yard (GWCMY) (the site), located at 7112 McFadden Avenue in Huntington Beach, California (Drawings G-1 and C-1). Soil remediation at the site consisted of excavation and onsite aboveground thermal treatment. This work was performed in general accordance with HLA's document entitled *Corrective Action Plan, Golden West College Maintenance Yard, Huntington Beach, California,* dated April 12, 1995 (HLA, 1995b).

This report describes the site background, summarizes remediation activities performed, and presents HLA's conclusions regarding achievement of site cleanup goals and acceptability of the site for closure. This report was prepared for the sole use of Coast Community College District (CCCD) for submittal to the Orange County Health Care Agency (OCHCA) and the California Regional Water Quality Control Board - Santa Ana Region (RWQCB). No other party should rely on the information contained herein without prior written consent of CCCD and HLA.

2.0 SITE BACKGROUND

2.1 Site Description and History

GWCMY is located at 7112 McFadden Avenue, near the southeast corner of McFadden Avenue and Golden West Street, in Huntington Beach, California. The site and surroundings are relatively level, at an elevation of approximately 25 feet above mean sea level. The site occupies approximately 3/4 acre; it contains two buildings on its north and south portions, and three sheds and a nursery on its western portion (Drawing C-2). The buildings are used as office space and for storage and repair of equipment. Two 1,000-gallon gasoline underground storage tanks (USTs) are located on the west side of the site (Drawing C-2).

In 1988, two 1,000-gallon gasoline USTs, formerly located on the northeast and southwest sides of the site, were excavated and removed. Applied Geosciences, Inc. (AGI) and Frey Environmental (Frey) conducted site investigations from 1988 through 1992. The results of investigations indicated the presence of hydrocarbon-affected soil and groundwater on the east side of the site. Free hydrocarbon product (FHP) thicknesses up to approximately 3 feet were measured in Wells MW-1, MW-3, and MW-8, and elevated concentrations of total petroleum hydrocarbons (TPH) and benzene were detected in soil samples collected at 10 feet below ground surface (bgs).

2.2 Subsurface Conditions

Subsurface soil observed during AGI and Frey investigations at the site consisted primarily of silty sand and silt to a depth of approximately 7.5 feet bgs, silty to fine-grained sand from approximately 7.5 to 11.5 feet bgs, and clay with interbedded fine-grained sand to the maximum depth drilled in the borings at the site (26.5 feet bgs). During the initial site investigations, groundwater was encountered during drilling at approximately 9.5 feet bgs, and the flow direction was to the southwest (AGI, 1988). Groundwater recovery (described below) has lowered groundwater levels (between the maintenance buildings) several feet below static levels.

Dissolved-phase hydrocarbons have been detected in groundwater samples collected from Wells MW-1, MW-3, MW-4, MW-7, MW-8, and MW-10; however, concentrations of TPH above 0.2 milligram per liter (mg/l) and benzene above 0.3 microgram per liter (μg/l), respectively, have not recently been detected in Well MW-4 or MW-10.

2.3 Remediation History

From 1988 through 1991, a total of approximately 275 gallons of FHP was recovered by hand-bailing Monitoring Wells MW-1, MW-3, and MW-8.

In April 1991, a groundwater treatment system was installed by Frey. From April 1991 through June 1995, groundwater was pumped from an 18-foot-deep, 120-foot-long collection trench through Wells RW-1 and RW-2, which were slotted in the gravel backfill of the trench. Recovered groundwater was pumped through an oil-water separator to remove FHP, then treated with granular activated carbon (GAC) and discharged, per RWQCB and National Pollutant Discharge Elimination System (NPDES) permit requirements, to an onsite storm drain. Approximately 2,400,000 gallons of groundwater have been extracted and treated through July 1995, and approximately 125 gallons of FHP are estimated to have been removed from the subsurface by the groundwater treatment system. FHP recovery and groundwater treatment have reduced measurable FHP to a sheen in Monitoring Wells MW-1, MW-3, and MW-8. The groundwater treatment system influent stream has been sampled each month since 1991 and the samples analyzed for TPH as gasoline (TPHg) and benzene, toluene, ethylbenzene, and xylenes (BTEX). The system influent concentrations have reached asymptotic levels.

HLA conducted a 10-day vapor extraction test in 1994. Approximately 175 equivalent gallons of gasoline were recovered during the test (HLA, 1995a).

Results of previous investigations indicated that hydrocarbon-affected soil at the site was primarily concentrated between approximately 8 to 12 feet bgs in the vicinity of Recovery Wells RW-1 and RW-2 and Monitoring Well MW-3. Both liquid- and vapor-phase hydrocarbons that were present in this soil zone above the groundwater acted as a continuing source that was not effectively removed by the groundwater treatment system. Therefore, HLA proposed excavation to remove this source. The extent of the proposed excavation is shown on Drawing C-3.

HLA's report entitled *Evaluation of Remedial Alternatives, Golden West College Maintenance Yard, Huntington Beach, California,* dated March 2, 1995 (HLA, 1995a), includes a summary of work performed by HLA and by others, in addition to evaluating remedial alternatives for the site.

3.0 EXCAVATION ACTIVITIES

Remedial excavation at the GWCMY began on August 1, 1995, and was completed on August 17, 1995. The scope of work consisted of excavating hydrocarbon-impacted soils from the area between the two maintenance buildings, hauling petroleum hydrocarbon-impacted soil to the onsite treatment location, backfilling the excavation with clean soil from the excavation and from the onsite borrow area excavation, treating the petroleum hydrocarbon-impacted soil onsite, and backfilling the borrow area excavation with treated soil.

3.1 Participants

OCHCA is the lead agency overseeing remediation and consults with the RWQCB on groundwater issues. Air quality emissions are regulated by the South Coast Air Quality Management District (SCAQMD) under Rule 1166.

HLA prepared the remedial design and bid document, provided construction and environmental oversight, supervised soil segregation, collected soil samples under the direction of OCHCA, and coordinated minor subcontractors and suppliers. Subcontractors under contract to HLA included Calvada Surveying (Calvada) of Anaheim, California, and SPL Fullerton Laboratory.

National Technical Systems Incorporated (NTS) of Fullerton, California under contract to CCCD, was the General Contractor for the project and performed excavation, loading, and hauling of soil; backfill; compaction; resurfacing; and borrow site restoration.

Ray Environmental Services (Ray) of Calabasas, California, under contract to NTS, performed soil treatment using a batch-process low-temperature thermal desorption method.

3.2 Preparation

Prior to excavation, the corrective action plan (CAP) and soil sampling plan prepared by HLA (1995b) were approved by OCHCA (Appendix A). HLA collected soil samples from six hand-augered borings at the borrow site, located in the fenced area north of the parking lot near the southwest corner of McFadden Avenue and Gothard Streets (Drawing C-1), to evaluate the suitability of borrow site soil for backfill. Boring logs from that investigation are included in Appendix B. HLA also obtained a well

destruction permit for Well MW-3 and a variance from the SCAQMD (Appendix C) allowing deviation from the soil containerization requirements of Rule 1166 (Section 3.4). A professional land survey of the maintenance yard, including utility research, was performed by Calvada. The previous groundwater recovery piping and electrical conduit were cut and capped outside the excavation limits. HLA prepared a site-specific health and safety plan to protect HLA workers and subcontractors against work hazards.

3.3 Removal of Asphalt Pavement and Utilities

Prior to excavation, approximately 500 cubic yards (yd^3) of asphalt was removed from the area between the two maintenance buildings and disposed of offsite. Approximately 500 gallons of waste oil was pumped from a grease interceptor on the northeast side of the site (Drawing C-2) and disposed of offsite (the manifest is included in Appendix D). During excavation, approximately 70 feet of 8-inch-diameter asbestos-cement storm drain pipe was removed and disposed of in accordance with regulatory protocols. Approximately 70 feet of 4-inch-diameter cast iron sewer pipe was also removed and disposed of. Monitoring Well MW-3 and the gravel trench recovery system were removed during excavation.

3.4 SCAQMD Rule 1166 Monitoring and Soil Segregation

Excavated soil was screened for volatile organic compound (VOC) emissions using a photoionization detector (PID) calibrated to a hexane standard in accordance with SCAQMD's Rule 1166 Compliance Plan. Soil with PID readings equal to or greater than 50 parts per million by volume (ppmv) was sprayed with water to reduce VOC emissions, as required by Rule 1166. Rule 1166 also requires containerization (storage in covered drums or bins) of soil with VOC emissions greater than 1,000 ppmv. However, a site-specific variance from the containerization requirement was obtained prior to the start of excavation that allowed soil with VOC emissions greater than 1,000 ppm to be loaded directly onto trucks, covered, hauled, and stockpiled at the onsite treatment/borrow area without intermediate containerization. Soil stockpiles were covered with plastic at the end of each working day.

Soil was initially segregated based on PID screening as low-, moderate-, or high-VOC soil and was stockpiled in separate locations. Low-VOC soil was stockpiled in the staging area on the west side of the maintenance yard; moderate-VOC soil was either temporarily stockpiled in the work area or loaded into dump trucks, hauled, and stockpiled near the southeast corner of the borrow/treatment area; and high-VOC soil was loaded into dump trucks, hauled, and stockpiled in the center of the borrow/treatment area. Samples of the stockpiled soil were collected and submitted for laboratory analysis as described in Section 3.5. Soil was classified as clean or as requiring treatment based on the results of laboratory

analyses: clean soil was approved by OCHCA for backfill, and petroleum hydrocarbon-impacted soil was treated onsite as described in Section 3.10.

3.5 Soil Sample Collection and Analysis

HLA collected and submitted soil samples for analysis during site remediation in general accordance with the Sampling and Analytical Testing Plan presented in the CAP (HLA, 1995b). Sampling frequency and location were established based on field judgement (e.g., PID readings, color, soil staining) and at the direction of OCHCA. Excavation sidewall and bottom samples were collected at a frequency of approximately one sample for each 150 square feet of exposed surface. Stockpile sampling was conducted at a frequency of approximately one sample for each 15 yd^3 of low-VOC and moderate-VOC soil, one sample for each 250 yd^3 of high-VOC soil, and one sample for each 50 yd^3 of treated soil.

Excavation sidewall and bottom soil samples were collected in brass sampling tubes using a hand-operated drive sampler, or from the excavator bucket. Stockpile soil samples were collected using a hand-operated drive sampler or by pushing sampling tubes directly into the stockpiled soil. The brass sampling tubes were sealed with Teflon-lined plastic caps, placed in ice-chilled coolers, and submitted under chain-of custody protocol to SPL Fullerton Laboratory. Samples were analyzed for TPHg using EPA Method 8015 modified for gasoline, and for BTEX using EPA Method 8020.

OCHCA directed vadose zone sidewall sampling in the excavation, low- and moderate-VOC soil stockpile sampling, and final confirmation sampling of treated soil. Results of laboratory analysis were discussed regularly with OCHCA.

Fifty-four soil samples were collected from the sides and bottom of the completed excavation at the locations shown on Drawing C-4 and analyzed for TPHg and BTEX. Thirty-six soil samples were collected from stockpiles of excavated soil at the locations shown on Drawing C-5 and analyzed for TPHg and BTEX to evaluate the soil as clean or petroleum hydrocarbon-impacted. Forty-seven soil samples were collected from the treatment stockpile at the locations shown on Drawing C-5 and analyzed for TPHg and BTEX to assess the effectiveness of treatment. Analytical results are summarized in Tables 1 through 4. Laboratory reports, including OCHCA chains-of custody, are included in Appendix E.

3.6 Conditions Encountered During Excavation

Soil encountered during excavation consisted of sand and silty sand fill from the surface to approximately 2 feet bgs. Most of this soil was classified as low-VOC soil based on PID screening except the soil excavated in the northeast corner, near the location of the former USTs. Silt was encountered from approximately 2 to 8 feet bgs and was generally classified as moderate-or high-VOC soil during segregation. Sand and silty sand were encountered from approximately 8 to 12 feet bgs, and clay was encountered from approximately 12 to 14 feet bgs. Soil excavated below a depth of 8 feet bgs was generally classified as high-VOC soil during segregation.

Laboratory analytical results for soil samples collected from the sidewalls of the completed excavation (Table 1) indicate that TPHg concentrations remaining in vadose zone soil (above 9.5 feet) range from nondetect to 5.5 milligrams per kilogram (mg/kg) along the south wall of the excavation; from nondetect to 1.7 mg/kg along the west wall of the excavation; from nondetect to 3.1 mg/kg along the north wall of the excavation; and from nondetect to 180 mg/kg along the east wall of the excavation. Benzene concentrations range from nondetect to 0.29 mg/kg along the south wall of the excavation; from nondetect to 0.028 mg/kg along the west wall of the excavation; from nondetect to 0.098 mg/kg along the north wall of the excavation; and from nondetect to 0.16 mg/kg along the east wall of the excavation. Elevated levels of TPHg and benzene (above 10 and 0.005 mg/kg, respectively) were detected primarily in samples collected from the east wall and northeast corner of the excavation and in samples collected from the excavation sidewalls at depths below 10 feet.

The gravel backfill of the former recovery trench was exposed along most of the south sidewall during excavation, and portions of sidewall supported by the gravel failed because of unstable soil conditions. Further removal of the remaining gravel presented a potential hazard to building foundations; therefore, the gravel was left in place. Sidewall samples were not collected from locations where the gravel backfill remained in place.

Approximately 36,000 gallons of water was produced during excavation dewatering activities. Dewatering maintained the groundwater level in the excavation at a depth of approximately 14 feet bgs. The water was temporarily stored in two 6,500-gallon polyethylene tanks, pumped through the existing groundwater treatment system, treated with GAC, and discharged under the existing site NPDES permit into the portion of the storm drain that remained operational. A groundwater sample was collected from one of the Baker tanks on August 7, 1995, labeled BT-1, submitted to SPL Fullerton Laboratory, and analyzed for TPHg and BTEX using EPA Methods 8015 and 8020. The sample contained TPHg and

benzene concentrations of 9.6 and 1.7 mg/l, respectively, as shown in Table 1. These TPHg and benzene concentrations are comparable to the influent concentrations previously detected during monthly groundwater treatment system influent sampling.

3.7 Excavation Limits

The completed excavation was approximately 120 feet long and 50 feet wide at the ground surface, and approximately 90 feet long and 20 feet wide at a depth of 14 feet bgs, the total depth excavated. The limits of the excavation extended to within approximately 10 feet of the existing USTs on the west side; to within approximately 10 feet of the buildings on the north and south sides, and to within approximately 5 feet of the fence, subsurface utilities, and grease interceptor on the east side and northeast corner of the maintenance yard. Enlarging the excavation in any direction would have potentially compromised the integrity of existing structures and utilities, as discussed in the CAP.

Criteria considered in determinating the excavation limits included analytical laboratory results, distribution and location of soil samples, and physical constraints (e.g., existing buildings, subsurface utilities, and USTs). These criteria were based on agreements reached prior to CAP preparation as documented in HLA's December 15, 1993, letter to OCHCA entitled *Remedial Alternatives, Former Gasoline UST Release, Golden West College Maintenance Yard, 7112 McFadden Avenue, Huntington Beach, California,* and in OCHCA's January 5, 1995, response entitled *Correspondence Concerning "Remedial Alternatives" from HLA* (Appendix A). Peter Peuron of OCHCA was onsite regularly during excavation to direct sampling activities and agreed that the excavation extent met these criteria. On August 11, 14, and 18, 1995, Calvada surveyed sections of the completed excavation and estimated the excavation volume at approximately 2,060 yd^3. The extent of the completed excavation is shown on Drawing C-4.

3.8 Construction of Subsurface Drain

Prior to backfilling with clean soil, a 4-foot-thick layer of gravel was placed in the bottom of the excavation. Approximately 100 feet of 8-inch-diameter, perforated Schedule 80 PVC pipe was installed in the gravel blanket at a depth of approximately 12 feet bgs and connected to a 12-inch-diameter Schedule 80 PVC riser at the west side of the excavation. The gravel was then covered with filter fabric. This drain system will allow for efficient purging of water from the gravel blanket following construction. Details of the drain system are shown on Drawings C-6 and C-7.

3.9 Backfilling, Compaction, and Reconstruction of Maintenance Yard

Backfilling and compaction began on August 19, 1995, and was completed on August 30, 1995. Soil used in the backfill consisted of clean soil from the excavation and clean soil excavated from the borrow area. The clean soil from the excavation had been previously approved for backfill by OCHCA. An HLA engineering technician observed backfilling activities and performed compaction testing. Backfill was placed in lifts a maximum of 8 inches in thickness, moisture conditioned to within 2 percent of optimum soil moisture, and compacted to a minimum of 90 percent of the relative dry density. Compaction test results are shown in Table 5.

Following backfilling and compaction, the sewer and storm drain were reinstalled. Pipe for the sewer and storm drain consisted of 4- and 8-inch-diameter Schedule 40 ABS and PVC pipe, respectively. The maintenance yard was resurfaced with asphalt and slurry coated, the concrete gutter was reinstalled, and the 12-inch-diameter PVC riser was completed to grade with a traffic-rated steel vault.

3.10 Contaminated Soil Treatment and Treatment Pile Sampling

Ray began treatment of contaminated soil on September 25, 1995, and continued treatment until approximately November 1, 1995. Contaminated soil was treated aboveground using batch-process low-temperature thermal desorption.

HLA collected a total of 22 soil samples from the treatment stockpile (Drawing C-5) on October 10 and November 1, 1995, to confirm treatment effectiveness. Samples were submitted to SPL Fullerton and analyzed for TPHg and BTEX using EPA Methods 8015 and 8020, respectively; the results are summarized in Table 3. Laboratory analytical results for samples collected on October 10, 1995, indicated elevated levels of TPHg and benzene in samples collected at the eastern corner of stockpile, and treatment continued until November 1, 1995. Laboratory analytical results for samples collected on November 1, 1995, indicated that treatment was complete.

Final confirmation sampling under the direction of OCHCA was performed on November 7 and 17, 1995. A total of 25 samples were collected and analyzed as described above. Laboratory analytical results for samples collected on November 7, 1995 (Table 4), indicated that elevated levels of petroleum hydrocarbons remained in a small portion of soil located near southeast end of the treatment pile. On November 17, 1995, soil near the southeast portion of the treatment pile underwent further segregation, and approximately 2 tons of soil with elevated PID readings was hauled offsite to American Remedial

Technologies in Lynwood, California, for treatment (the manifest is included in Appendix D). OCHCA observed soil segregation and directed final confirmation sampling of soil at the southeast end of the treatment pile. OCHCA approved the remaining treated soil for backfill in the borrow area on November 20, 1995, based on the results of soil sample analysis (Appendix A). Sample locations are shown on Drawing C-5, and analytical results of confirmation sampling are summarized in Table 4. Laboratory reports, including OCHCA chains-of-custody, are included in Appendix E.

3.11 Borrow Site Backfill, Compaction, and Restoration

Backfill and compaction of the borrow area excavation began on November 21, 1995, and was completed on November 27, 1995. (Clean soil had been previously excavated from the borrow area and used as backfill for the maintenance yard excavation.) An HLA engineering technician observed backfilling activities and performed compaction testing. Backfill, consisting of treated soil from the maintenance yard excavation, was placed in lifts a maximum of 12 inches in thickness, moisture conditioned to within 2 percent of optimum soil moisture, and compacted to a minimum of 90 percent of the relative dry density. Compaction test results are summarized in Table 6. The borrow area was reseeded and restored to its original surface condition on November 28, 1995.

4.0 CONCLUSION

The August 1995 remedial excavation removed the hydrocarbon-affected soil that could feasibly be removed from the site. Removal of the relatively small amount of hydrocarbon-impacted soil remaining in place may compromise the structural integrity or placement of site buildings, USTs, and utilities, or require the removal and replacement of those improvements. HLA recommends no further soil remediation at this site.

HLA will purge groundwater from the gravel blanket to remove residual dissolved hydrocarbons in and around the excavation backfill. Groundwater will be pumped from the 12-inch-diameter riser to the groundwater treatment system, treated with GAC, and discharged to the onsite storm drain under the current site NPDES permit. Groundwater monitoring and sampling will be conducted after the gravel blanket has been purged to assess residual hydrocarbon concentrations in groundwater.

REFERENCES

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--- 1995a. *Evaluation of remedial alternatives, Golden West College Maintenance Yard, 7112 McFadden Avenue, Huntington Beach, California,* March 2.

--- 1995b. *Corrective action plan, Golden West College Maintenance Yard, Huntington Beach, California,* April 12.

Table 1
Summary of Soil Analytical Results
Excavation Sidewall and Bottom Sampling

Sample I.D.	Sample Depth (feet)	Approximate Location	Date Sampled	EPA 8015 Volatile Fuel Hydrocarbons (mg/kg)	EPA 8020 Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Comments
B-1	23	West/Center	08/07/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)	
B-2	14	West/Center	08/07/95	2.2	0.015	(0.005)	0.053	0.008	
B-3	14	SW Corner	08/07/95	120	(0.005)	0.022	0.48	0.042	
B-4	14	South/Center	08/07/95	5.5	0.051	0.04	0.071	0.52	
B-5	14	Center	08/07/95	3.8	(0.005)	(0.005)	0.04	0.012	
B-6	14	South/Center	08/08/95	4.4	0.31	0.008	0.14	0.025	
B-7	14	South/East	08/08/95	33	0.18	0.3	0.34	0.52	
B-8*	14*	East/Center	08/08/95	1,300	12	37	21	98	
B-9	14	NW Corner	08/10/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)	
B-10	14	North/Center	08/10/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)	
B-11	14	North/Center	08/10/95	(1.0)	0.013	(0.005)	(0.005)	(0.005)	
B-12	14	North/Center	08/10/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)	
B-14*	14	South/East	08/14/95	1,000	1.8	1.8	24	46	
B-15*	16	NE Corner	08/17/95	260	2.9	0.87	2.5	9.7	
B-16	16	NE Corner	08/17/95	74	0.84	0.47	1.5	6	
W-1	6 *	South/Center	08/07/95	1.8	(0.005)	(0.005)	0.026	0.055	
W-2	6 *	South/West	08/07/95	5.5	0.006	(0.005)	0.036	(0.005)	
W-3	9 *	South/Center	08/07/95	4.1	0.29	(0.005)	0.3	(0.005)	
W-4	6 *	South/Center	08/07/95	2.5	0.009	(0.005)	0.19	(0.005)	
W-5	6	South/Center	08/08/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)	
W-6	9.5	South/Center	08/08/95	47	2	0.008	1.9	0.23	
W-7	9 *	SE Corner	08/08/95	1.3	0.021	0.044	0.016	0.054	Excavated
W-8	7 *	SE Corner	08/08/95	(1.0)	(0.005)	0.007	0.007	0.023	Excavated

Notes:
Sample depth is approximate, and is referenced to the top of the asphalt.
(1.0) = compound not detected above enclosed detection limits.
* indicates that the sample was collected under OCHCA supervision.
Excavated = Additional soil was excavated and removed from the area where the sample was collected.
mg/kg = milligrams per kilogram.
** reporting units are milligrams per liter

Table 1
Summary of Soil Analytical Results
Excavation Sidewall and Bottom Sampling

Sample I.D.	Sample Depth (feet)	Approximate Location	Date Sampled	EPA 8015 Volatile Fuel Hydrocarbons (mg/kg)	EPA 8020 Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Comments
W-9	6 *	East/Center	08/08/95	(1.0)	0.021	(0.005)	0.013	0.046	Excavated
W-10	9 *	East/Center	08/08/95	940	2.8	31	14	77	Excavated
W-11	6 *	SE Corner	08/08/95	4.5	0.066	(0.005)	0.21	0.15	Excavated
W-12	5	SW Corner	08/09/95	1.3	(0.005)	(0.005)	0.013	0.01	
W-13	6	West/Center	08/09/95	1.7	0.028	(0.005)	0.054	0.054	
W-14	5	SW Corner	08/10/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)	
W-15	8 *	SW Corner	08/10/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)	
W-16	3 *	West/Center	08/10/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)	
W-17	3 *	NW Corner	08/10/95	2	(0.005)	(0.005)	(0.005)	0.008	
W-18	6 *	NW Corner	08/10/95	1.4	(0.005)	(0.005)	0.04	0.009	
W-19	10	NW Corner	08/10/95	180	(0.025)	0.29	1.1	1.7	
W-20	5	North/Center	08/10/95	1.4	0.098	0.033	0.013	0.15	
W-21	10	North/Center	08/10/95	20	0.074	0.039	0.12	0.08	
W-22	10	North/Center	08/10/95	1,900	4.9	3.2	23	44	
W-23	5	North/Center	08/10/95	1.6	0.029	(0.005)	0.044	0.019	
W-24	4 *	NW Corner	08/11/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)	
W-25	5 *	NW Corner	08/11/95	2.8	0.022	(0.005)	0.025	0.059	
W-26	5 *	North/Center	08/11/95	3.1	0.063	(0.005)	0.14	0.026	
W-27	5 *	NE Corner	08/14/95	(1)	(0.005)	(0.005)	(0.005)	(0.005)	
W-28	5 *	NE Corner	08/14/95	(1)	0.006	(0.005)	0.01	0.016	Excavated
W-29	6 *	East/Center	08/14/95	(1)	(0.005)	(0.005)	0.009	0.042	Excavated
W-30	6 *	SE Corner	08/14/95	(1)	(0.005)	(0.005)	0.01	0.039	
W-31	10	NE Corner	08/14/95	510	2.4	19	8.2	44	

Notes:
Sample depth is approximate, and is referenced to the top of the asphalt.
(1.0) = compound not detected above enclosed detection limits.
* indicates that the sample was collected under OCHCA supervision.
Excavated = Additional soil was excavated and removed from the area where the sample was collected.
mg/kg = milligrams per kilogram.
** reporting units are milligrams per liter

Table 1
Summary of Soil Analytical Results
Excavation Sidewall and Bottom Sampling

Sample I.D.	Sample Depth (feet)	Approximate Location	Date Sampled	EPA 8015 Volatile Fuel Hydrocarbons (mg/kg)	EPA 8020 Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Comments
W-32	10	NE Corner	08/14/95	30,000	70	910	320	1700	Excavated
W-33	10	East/Center	08/14/95	18	0.65	0.055	2.2	0.059	Excavated
W-34	10	SE Corner	08/14/95	260	0.79	0.26	7.5	6.9	
W-35	10	NE Corner	08/17/95	36,000	110	490	590	1100	
W-36	6 *	NE Corner	08/17/95	180	0.16	0.037	1	2.4	
W-37	6 *	East/Center	08/17/95	1.4	(0.005)	0.027	0.02	0.15	
W-38	10 *	East/Center	08/17/95	310	0.025	0.046	0.037	1.2	
W-39	7 *	East/Center	08/17/95	(1.0)	(0.005)	(0.005)	0.02	0.07	
BT-1	Water *		08/18/95	9.6	1.7	0.21	0.93	0.31	

Notes:
Sample depth is approximate, and is referenced to the top of the asphalt.
(1.0) = compound not detected above enclosed detection limits.
* indicates that the sample was collected under OCHCA supervision.
Excavated = Additional soil was excavated and removed from the area where the sample was collected.
mg/kg = milligrams per kilogram.
** reporting units are milligrams per liter

Table 2
Summary of Soil Analytical Results
Excavated Soil Stockpile Sampling

Sample I.D.		Results of Initial Screening	Date Sampled	EPA 8015 Volatile Fuel Hydrocarbons (mg/kg)	EPA 8020 Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Classification
S-1	*	Low-VOC	08/03/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)	Clean
S-2	*	Low-VOC	08/03/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)	Clean
S-3	*	Low-VOC	08/03/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)	Clean
S-4	*	Moderate-VOC	08/03/95	1.5	0.017	0.015	0.025	(0.005)	Hydrocarbon-Impacted
S-5	*	Moderate-VOC	08/03/95	(1.0)	(0.005)	0.0055	(0.005)	(0.005)	Hydrocarbon-Impacted
S-6	*	Moderate-VOC	08/03/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)	Hydrocarbon-Impacted
S-7		High-VOC	08/04/95	18	0.18	0.17	0.31	1.4	Hydrocarbon-Impacted
S-8		High-VOC	08/04/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)	Hydrocarbon-Impacted**
S-9		Low-VOC	08/04/95	(1.0)	(0.005)	(0.005)	0.006	0.021	Clean
S-10		Low-VOC	08/04/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)	Clean
S-11		Moderate-VOC	08/04/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)	Clean
S-12		Moderate-VOC	08/04/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)	Clean
S-13		Moderate-VOC	08/04/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)	Clean
S-14		High-VOC	08/08/95	37	0.009	(0.005)	0.005	0.47	Hydrocarbon-Impacted
S-15		High-VOC	08/08/95	250	3.3	1.4	4.4	18	Hydrocarbon-Impacted
S-16		High-VOC	08/08/95	730	2.9	18	15	45	Hydrocarbon-Impacted
S-17		High-VOC	08/08/95	680	9.8	24	13	56	Hydrocarbon-Impacted
S-18	*	Moderate-VOC	08/08/95	4.5	0.013	0.085	0.044	0.35	Hydrocarbon-Impacted
S-19	*	Moderate-VOC	08/08/95	3.7	0.028	0.37	0.2	1.4	Hydrocarbon-Impacted
S-20		Low-VOC	08/09/95	(1.0)	(0.005)	(0.005)	(0.005)	0.006	Resampled: S-27; S-28
S-21		Low-VOC	08/09/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)	Resampled: S-27; S-28
S-22		Low-VOC	08/09/95	1.0	0.024	(0.005)	0.034	0.056	Resampled: S-27; S-28
S-23		Moderate-VOC	08/10/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)	Clean

Notes:
mg/kg = milligrams per kilogram.
* indicates that the sample was collected under OCHCA supervision.
(1.0) = compound not detected above enclosed detection limits.
** = additional samples collected from this stockpile were hydrocarbon-impacted.

Table 2
Summary of Soil Analytical Results
Excavated Soil Stockpile Sampling

Sample I.D.		Results of Initial Screening	Date Sampled	EPA 8015 Volatile Fuel Hydrocarbons (mg/kg)	EPA 8020 Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Classification
S-24		Moderate-VOC	08/10/95	2.3	0.076	0.024	0.03	0.23	Resampled: S-31
S-25		Moderate-VOC	08/10/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)	Clean
S-26		Moderate-VOC	08/10/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)	Clean
S-27	*	Low-VOC	08/10/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)	Clean
S-28	*	Low-VOC	08/10/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)	Clean
S-29		High-VOC	08/11/95	140	(0.005)	0.024	0.011	4.6	Hydrocarbon-Impacted
S-30		High-VOC	08/11/95	170	0.007	0.015	0.009	5.6	Hydrocarbon-Impacted
S-31	*	Moderate-VOC	08/14/95	7.6	0.073	(0.005)	0.19	0.065	Hydrocarbon-Impacted
S-32	*	Moderate-VOC	08/14/95	(1)	(0.005)	(0.005)	(0.005)	(0.005)	Clean
S-33	*	Moderate-VOC	08/14/95	(1)	(0.005)	(0.005)	(0.005)	(0.005)	Clean
S-34	*	Moderate-VOC	08/14/95	(1)	(0.005)	(0.005)	(0.005)	(0.005)	Clean
S-35		Moderate-VOC	08/18/95	(1)	(0.005)	(0.005)	(0.005)	(0.005)	Clean
S-36		Moderate-VOC	08/18/95	(1)	(0.005)	(0.005)	(0.005)	(0.005)	Clean

Notes:
mg/kg = milligrams per kilogram.
* indicates that the sample was collected under OCHCA supervision.
(1.0) = compound not detected above enclosed detection limits.

Table 3
Summary of Soil Analytical Results
Treatment Stockpile Interim Sampling

Sample Location	Depth (Feet)	Date Sampled	EPA 8015 Volatile Hydrocarbons (mg/kg)	EPA 8020 Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)
TS-1	3	10/10/95	(1.0)	(0.005)	(0.005)	(0.005)	0.009
TS-2	1	10/10/95	860	2.7	34	13	64
TS-3	7	10/10/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)
SPl-5 *	2-5	10/05/95	290	(0.005)	0.920	0.530	1.50
TS-4	7	10/10/95	320	(0.005)	0.008	2.2	4.3
TS-4	9	10/10/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)
SPl-17 *	2-5	10/05/95	180	(0.005)	0.500	0.720	3.30
TS-5	6	10/10/95	6	0.011	(0.005)	0.26	0.20
TS-6	6	10/10/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)
TS-7	9	10/10/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)
TS-8	6	10/10/95	(1.0)	(0.005)	(0.005)	(0.005)	0.005
TS-9	6	10/10/95	150	(0.005)	(0.005)	1.1	1.9
TS-10	9	10/10/95	2.7	0.008	(0.005)	0.050	(0.005)
TS-11	3	10/10/95	(1.0)	(0.005)	0.019	0.006	0.033
TS-12	1	11/01/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)
TS-13	9	11/01/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)
TS-14	6	11/01/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)
TS-15	3	11/01/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)
TS-16	3	11/01/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)
TS-17	3	11/01/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)
TS-18	6	11/01/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)
TS-19	3	11/01/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)
TS-20	9	11/01/95	1.8	0.007	(0.005)	0.037	(0.005)
TS-21	6	11/01/95	1.4	(0.005)	(0.005)	0.052	(0.005)

Notes:
Samples were labeled and appear as S-1, S-2, etc. on laboratory reports and chains-of-custody. Samples were redesignated as TS-1, in tables and on drawings appearing in this report to avoid confusion with samples collected from the excavated soil stockpiles (S-
mg/kg = milligrams per kilogram.
(1.0) = compound not detected above enclosed detection limits.
* = Selected Ray Environmental analytical result

Table 4
Summary of Soil Analytical Results
Treatment Stockpile
OCHCA Confirmation Sampling

Sample Location	Date Sampled	EPA 8015 Volatile Hydrocarbons (mg/kg)	EPA 8020 Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)
TS-19	11/07/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)
TS-20	11/07/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)
TS-21	11/07/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)
TS-22	11/07/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)
TS-23	11/07/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)
TS-24	11/07/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)
TS-25	11/07/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)
TS-26	11/07/95	240	2.4	0.18	3.8	7.0
TS-27	11/07/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)
TS-28	11/07/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)
TS-29	11/07/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)
TS-30	11/07/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)
TS-31	11/07/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)
TS-32	11/07/95	1.1	(0.005)	(0.005)	0.016	0.071
TS-33	11/07/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)
TS-34	11/07/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)
TS-35	11/07/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)
TS-36	11/07/95	990	(0.005)	3.4	11	41
TS-37	11/07/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)
TS-38	11/07/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)
TS-39	11/07/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)
TS-40	11/17/95	NA	NA	NA	NA	NA
TS-41	11/17/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)
TS-42	11/17/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)
TS-43	11/17/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)

Notes:
Samples were labeled and appear as S-1, S-2, etc. on laboratory reports and chains-of-custody. Samples were redesignated as TS-1, TS-2, et in tables and on drawings appearing in this report to avoid confusion with samples collected from the excavated soil stockpiles (S-1, S-2, etc
mg/kg = milligrams per kilogram.
(1.0) = compound not detected above enclosed detection limits.
NA = not analyzed (per OCHCA direction)

Table 5
Summary of Field Density Test Results
(Maintenance Yard Excavation)

Test I.D.	Date	Approximate Elevation* (feet)	Moisture Content (%)	Field Dry Density (pcf)	Maximum Dry Density (pcf)	Relative Compaction (%)	Comments
1	08/19/95	16.2	13.5	95.0	103	92	Pass
2	08/19/95	15.4	13.6	101.0	103	98	Pass
3	08/19/95	15.6	13.0	98.3	103	95	Pass
4	08/19/95	16.3	18.3	90.1	103	87	Fail - Retest 6
5	08/21/95	16.8	18.0	98.3	103	95	Pass
6	08/21/95	16.2	19.7	99.7	103	97	Pass - Retest of 4
7	08/21/95	17.7	19.0	103.0	103	100	Pass
8	08/22/95	17.2	16.3	101.4	103	98	Pass
9	08/22/95	18.5	15.6	101.2	103	98	Pass
10	08/23/95	19.0	12.3	106.3	122	87	Fail - Retest 11
11	08/23/95	19.0	12.3	111.3	122	91	Pass - Retest of 10
12	08/23/95	19.7	12.0	111.0	122	91	Pass
13	08/24/95	20.3	19.0	99.4	103	97	Pass
14	08/24/95	21.1	19.0	102.0	108	94	Pass
15	08/24/95	22.0	15.6	100.8	105	96	Pass
16	08/26/95	22.6	12.3	108.8	103	106	Pass
17	08/26/95	23.4	17.6	100.7	103	98	Pass
1A	08/29/95	24.9	11.8	112.6	124	91	Pass
1B	08/29/95	24.0	14.1	121.8	124	98	Pass
1C	08/29/95	24.2	9.1	114.9	124	93	Pass
1D	08/29/95	24.5	12.3	116.0	124	94	Pass
B1	09/08/95	25.0	7.9	123.3	128	96	Pass
B2	09/08/95	25.0	7.2	121.9	128	95	Pass
B3	09/08/95	25.0	10.6	124.4	128	97	Pass

Notes:

pcf = pounds per cubic foot

* = approximate elevation above mean sea level (MSL) referenced to MW-07 well box rim, at 25.11 feet MSL.

Table 6
Summary of Field Density Test Results
(Borrow Area Excavation)

Test I.D.	Date	Approximate Depth* (feet)	Moisture Content (%)	Field Dry Density (pcf)	Maximum Dry Density (pcf)	Relative Compaction (%)	Comments
1	11/21/95	8.0	8.9	108.0	120	90	Pass
2	11/21/95	7.5	15.6	109.5	120	91	Pass
3	11/21/95	6.0	18.0	108.5	120	90	Pass
4	11/21/95	7.0	16.7	110.7	120	92	Pass
5	11/21/95	5.5	17.2	113.4	120	95	Pass
6	11/21/95	5.0	16.0	111.7	120	93	Pass
7	11/22/95	4.0	15.6	116.1	120	97	Pass
8	11/22/95	4.5	15.8	115.2	120	96	Pass
9	11/22/95	4.5	16.2	111.1	120	93	
10	11/22/95	4.0	15.4	113.3	120	94	
11	11/22/95	3.0	20.1	104.5	120	87	Fail - Retest 11A
12	11/22/95	3.5	17.4	115.2	120	96	
11A	11/27/95	3.0	16.8	114.4	120	95	Pass - Retest of 11
13	11/27/95	2.5	17.6	116.5	120	97	
14	11/27/95	2.0	18.0	112.7	120	94	
15	11/27/95	1.5	16.6	115.1	120	96	
16	11/27/95	1.0	17.0	112.3	120	94	

Notes:

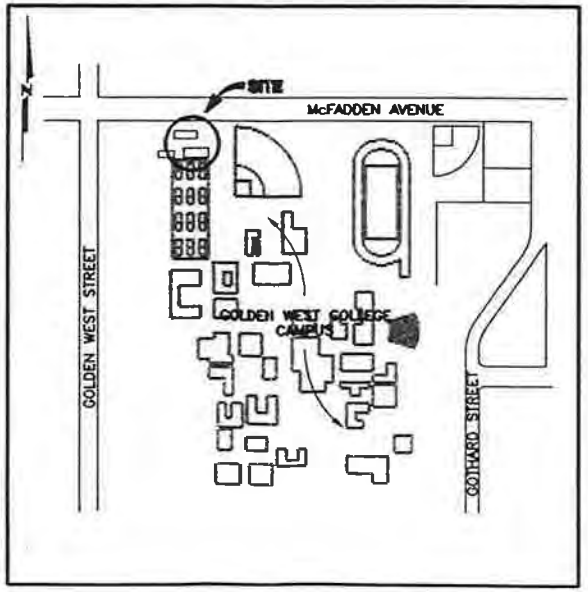
pcf = pounds per cubic foot

* = approximate depth below ground surface at the southwest corner of the borrow area excavation.

HUNTINGTON BEACH, CALIFORNIA



VICINITY MAP
NTS



LOCATION MAP
NTS

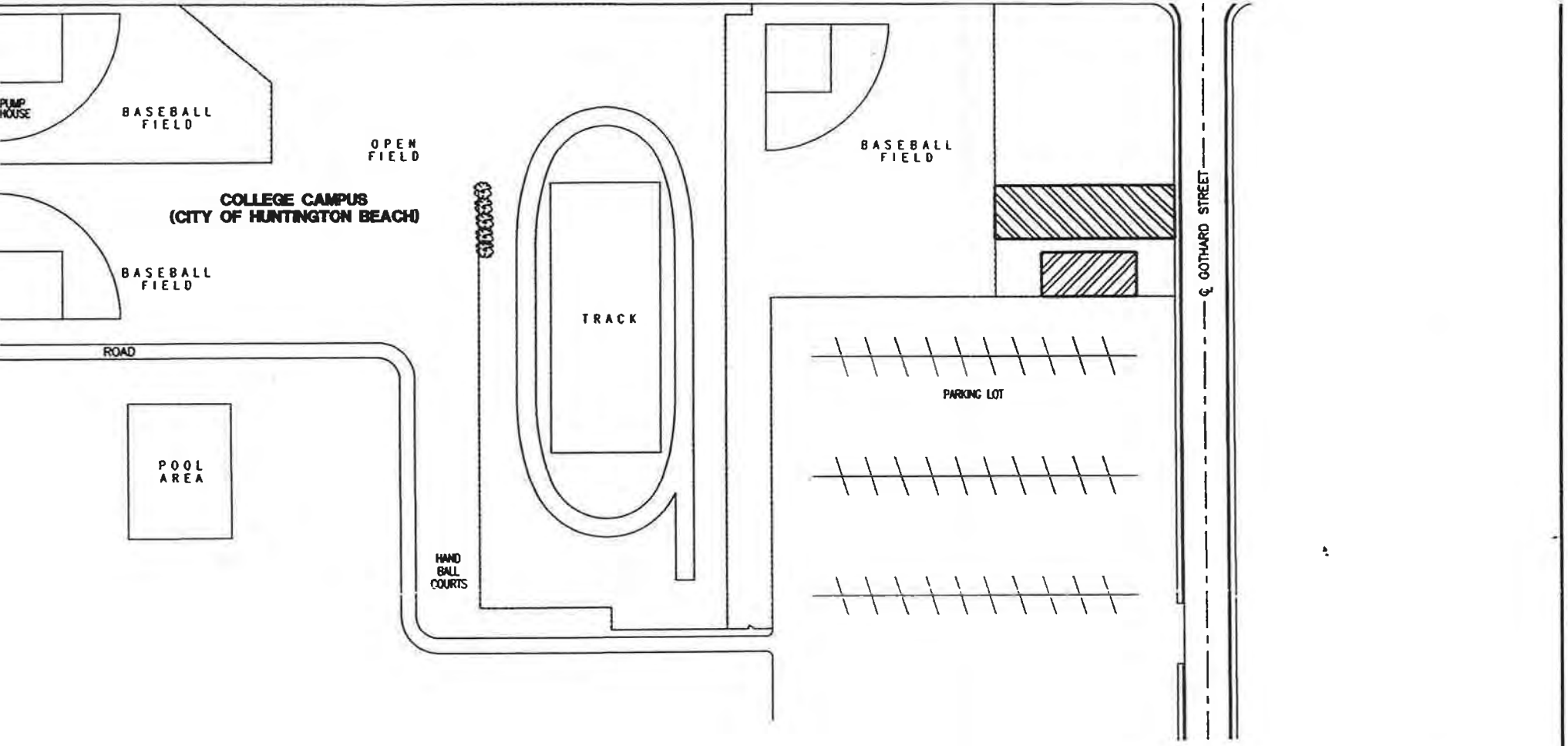
PREPARED FOR

COAST COMMUNITY COLLEGE DISTRICT
1370 ADAMS AVENUE
COSTA MESA, CALIFORNIA 92626

PREPARED BY

Harding Lawson Associates
Engineering and
Environmental Services
30 CORPORATE PARK, SUITE 400
IRVINE, CALIFORNIA 92714
(714) 260-1800
CONTACT: LYNN FLANIGAN

DRAWING:	G-1
SHEET:	1 OF 8
REVISION NUMBER:	
DATE:	2/96





100 0 100 200

SCALE IN FEET

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Environmental Services
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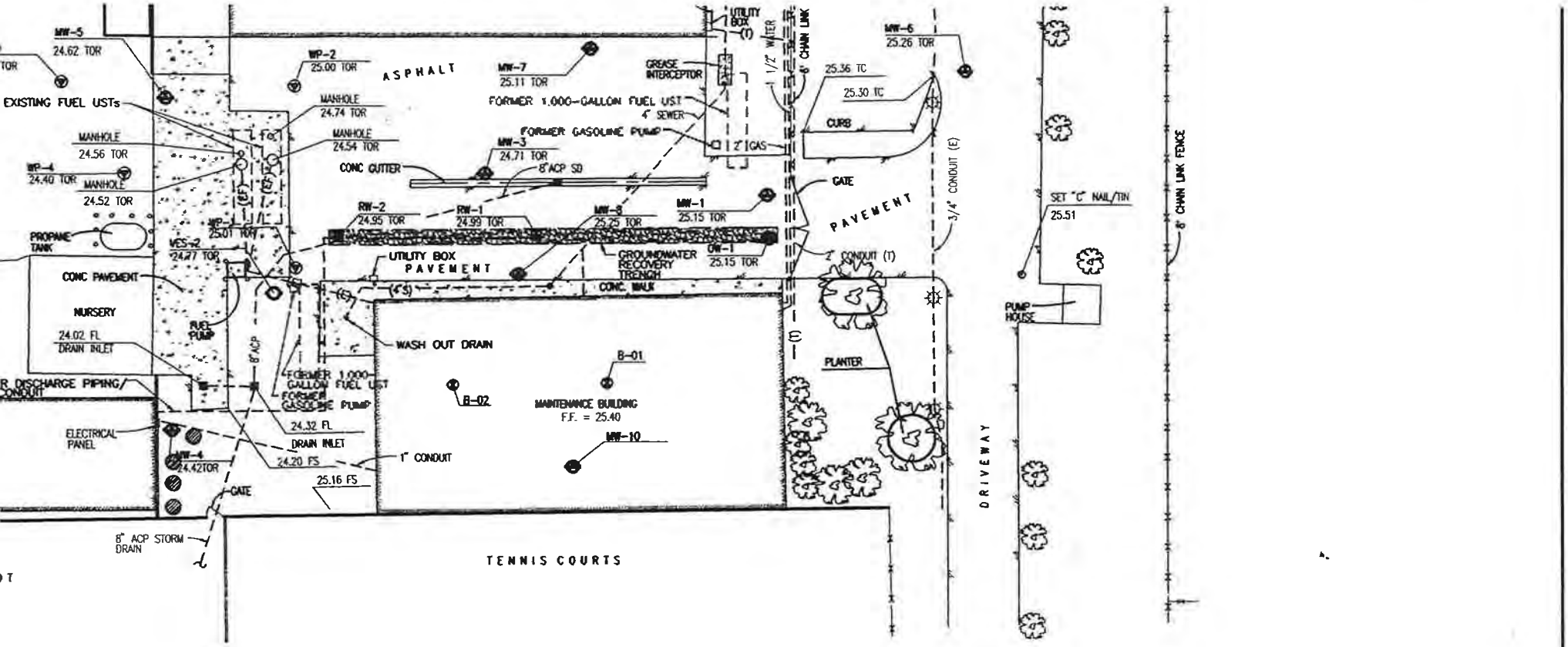
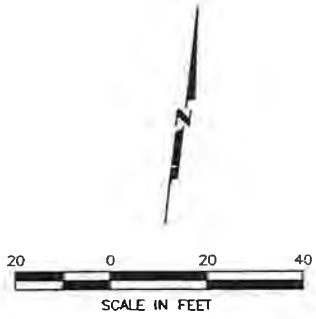
Golden West College Maintenance Yard
Huntington Beach, California

AREA MAP

DRAWING: C-1
SHEET: 2 OF 8
REVISION NUMBER:
DATE: 2/96





EXPLANATION

- GROUNDWATER MONITORING WELL
- VAPOR EXTRACTION WELL
- RECOVERY WELL
- HANDAUGER/WELL POINT
- BORING
- GROUNDWATER TREATMENT TANKS
- EDGE OF PAVEMENT
- PARKING LOT LIGHT
- POWER POLE
- POWER POLE W/ GUY
- GAS VALVE
- MONOPOLE
- DRAIN
- CHAIN LINK FENCE
- LANDSCAPE TREE
- EUCALYPTUS TREE
- CENTER LINE
- T TELEPHONE CONDUIT
- E ELECTRICAL CONDUIT
- EF ELECTRICAL AND FUEL CONDUIT
- G GAS LINE
- S SEWER LINE
- SD STORM DRAIN
- TOR TOP OF RIM
- TC TOP OF CURB
- FS FINISH SURFACE
- FF FINISH FLOOR
- ACP ASBESTOS CEMENT PIPE

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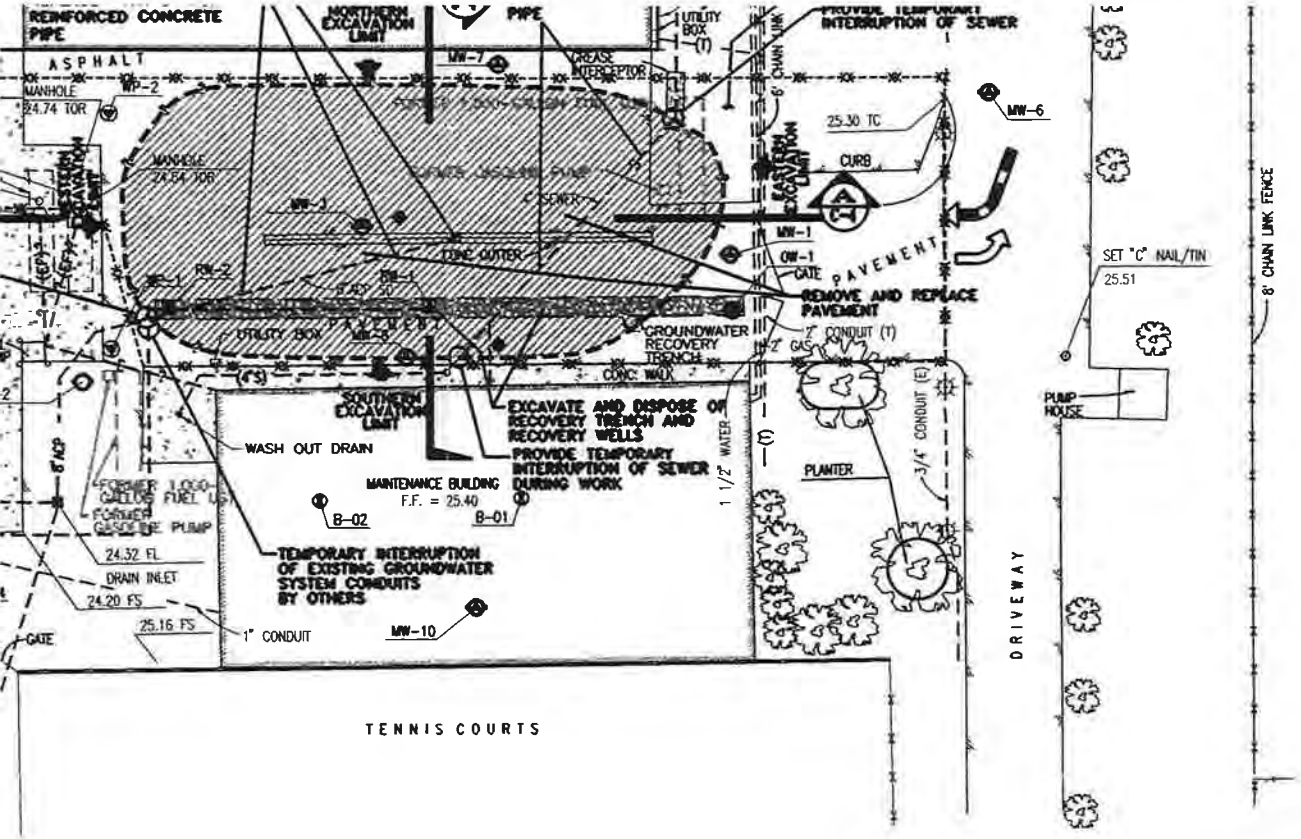
Golden West College Maintenance Yard
Huntington Beach, California

PRE-EXCAVATION SITE PLAN

DRAWING: C-2
SHEET: 3 OF 8
REVISION NUMBER:
DATE: 2/96



EXPLANATION

CHAIN LINK FENCE	APPROXIMATE MAXIMUM LIMITS OF PROPOSED REMEDIAL EXCAVATION (TOP OF SLOPE)
LANDSCAPE TREE	INDICATES TRUCK/EQUIPMENT EGRESS ROUTE
EUCALYPTUS TREE	INDICATES TRUCK/EQUIPMENT INGRESS ROUTE
CENTER LINE	INDICATES WELL TO BE ABANDONED BY HLA, PRIOR TO START OF EXCAVATION
TELEPHONE CONDUIT	TEMPORARY FENCE
ELECTRICAL CONDUIT	
ELECTRICAL AND FUEL CONDUIT	
GAS LINE	
SEWER LINE	
STORM DRAIN	
TOP OF RIM	
TOP OF CURB	
FINISH SURFACE	
FINISH FLOOR	
ASBESTOS CEMENT PIPE	

20 0 20 40

SCALE IN FEET

5. ACCESS TO REGULAR DOORWAYS AT BOTH MAINTENANCE BUILDINGS SHALL BE MAINTAINED AT ALL TIMES.

6. CONTRACTOR SHALL CONDUCT THE EXCAVATION, STOCKPILING, LOADING, AND ANY OTHER SOIL HANDLING IN ACCORDANCE WITH THE SCAQMD RULE 1166 MITIGATION PLAN. CONTRACTOR SHALL OBTAIN A PLAN BEFORE START OF THE EXCAVATION. A COPY OF THE PLAN SHALL BE KEPT AT THE SITE AT ALL TIMES.

7. CONTRACTOR SHALL PROVIDE DUST CONTROL AT THE SITE DURING THE EXCAVATION, STOCKPILING, AND BACKFILLING. THE DUST CONTROL METHOD SHALL BE ACCEPTABLE TO SCAQMD AND THE CITY OF HUNTINGTON BEACH.

8. TEMPORARY 6-FOOT-HIGH 100% SCREENED CHAIN-LINK FENCING SHALL BE INSTALLED AROUND THE EXCAVATION.

9. A GRADING PERMIT WILL NOT BE REQUIRED AS INDICATED BY THE CITY OF HUNTINGTON BEACH PUBLIC WORKS DEPARTMENT.

10. BACKFILL OF THE EXCAVATION SHALL BE PERFORMED TO SUBGRADE OF ASPHALT PAVEMENT BY THE CONTRACTOR WITH EXCAVATED CLEAN SOIL, TREATED SOIL, OR IMPORTED SOIL. FILL CAN ONLY BE PLACED BY THE CONTRACTOR AFTER THE ORANGE COUNTY HEALTH CARE AGENCY (OCHCA) HAS PROVIDED WRITTEN APPROVAL OF THE EXCAVATION

11. AREAS TO RECEIVE FILL SHALL BE SCARIFIED TO A DEPTH OF APPROXIMATELY 8 INCHES, MOISTURE CONDITIONED TO WITHIN 2 PERCENT OF OPTIMUM MOISTURE CONTENT, AND COMPACTED TO AT LEAST 90-PERCENT RELATIVE COMPACTION (ASTM D1557). A CRUSHED ROCK BLANKET, A MINIMUM OF 2-FEET IN THICKNESS, SHALL BE PLACED AT THE BOTTOM OF THE EXCAVATION TO STABILIZE AND PROVIDE A WORKING SURFACE TO MITIGATE EXPECTED SATURATED, PUMPING, AND/OR SOFT CONDITIONS, AND TO BE USED AS A POST-REMEDIATION PERMEABLE MEDIUM. CRUSH ROCK SHALL MEET SECTION 200.1.2 OF SSPWC. A FILTER FABRIC (MIRAFI 140 N OR EQUIVALENT) SHALL BE PLACED ABOVE THE BLANKET. A 6-INCH SCHEDULE 80 PERFORATED PVC COLLECTION PIPE CONNECTED TO A RISER SHALL BE INSTALLED IN THE BLANKET (SEE SECTION C AND DETAIL 2 ON DRAWING C-4).

12. FILL SOILS SHALL BE FREE OF ORGANICS, DEBRIS, AND ANY DELETERIOUS MATERIALS, AND FREE OF PARTICLES GREATER THAN 4 INCHES. FILL SOILS (INCLUDING CLEAN, TREATED, OR IMPORT SOILS) SHALL BE BLENDED UNIFORMLY, PLACED IN LIFTS A MAXIMUM OF 8 INCHES IN THICKNESS, MOISTURE CONDITIONED TO WITHIN 2 PERCENT OF OPTIMUM MOISTURE CONTENT, AND COMPACTED TO A RELATIVE COMPACTION OF 90-PERCENT RELATIVE COMPACTION (ASTM D1557). FULL-TIME OBSERVATION AND TESTING OF THE BACKFILL WILL BE PERFORMED BY HLA.

13. TEMPORARY POWER AND WATER WILL BE AVAILABLE TO THE CONTRACTOR AT THE MAINTENANCE BUILDING. BOTH SERVICES WILL BE AT NO CHARGE TO THE CONTRACTOR FOR ITS REASONABLE USE DURING REMEDIATION.

14. CONTRACTOR SHALL RESTORE OR REPLACE ALL SITE IMPROVEMENTS (e.g., CONCRETE DITCH, PAVEMENT, CATCH BASIN, SEWER) DESTROYED AS PART OF EXCAVATION ACTIVITIES TO THEIR ORIGINAL CONDITION, PER DETAILS SHOWN ON DRAWING R-1 AND R-2. ASBESTOS CEMENT PIPE SHOULD BE REPLACED BY REINFORCED CONCRETE PIPE.

15. PHOTOSURVEYING SHALL BE PERFORMED BY THE CONTRACTOR IN THE PRESENCE OF HLA AND GCCD TO DOCUMENT STATUS OF ALL SITE CONDITIONS PRIOR TO THE START OF ANY SITE ACTIVITY BY THE CONTRACTOR.

16. SANDBAGS AT PERIMETER OF EXCAVATION SHALL BE USED AS NEEDED TO PROVIDE DRAINAGE/EROSION CONTROL DURING THE EXCAVATION PHASES.

17. SANITATION FACILITIES SHALL BE MAINTAINED BY CONTRACTOR ONSITE DURING ALL WORK ACTIVITIES.

18. TRUCK CIRCULATION (INGRESS OR EGRESS) THROUGH THE WESTERN END OF SITE WILL BE ALLOWED ONLY FOR EMPTY TRUCKS. THE CONTRACTOR SHALL PROVIDE GATE(S) AND FLAGMEN AS NECESSARY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES CAUSED BY TRUCK CIRCULATION.

19. BACKFILL IN THE BORROW AREA SHALL BE PLACED IN LAYERS, A MAXIMUM OF 12 INCHES THICK, MOISTURE CONDITIONED AND COMPACTED TO AT LEAST 90 PERCENT RELATIVE COMPACTION (ASTM 1557).

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Engineering and Environmental Services
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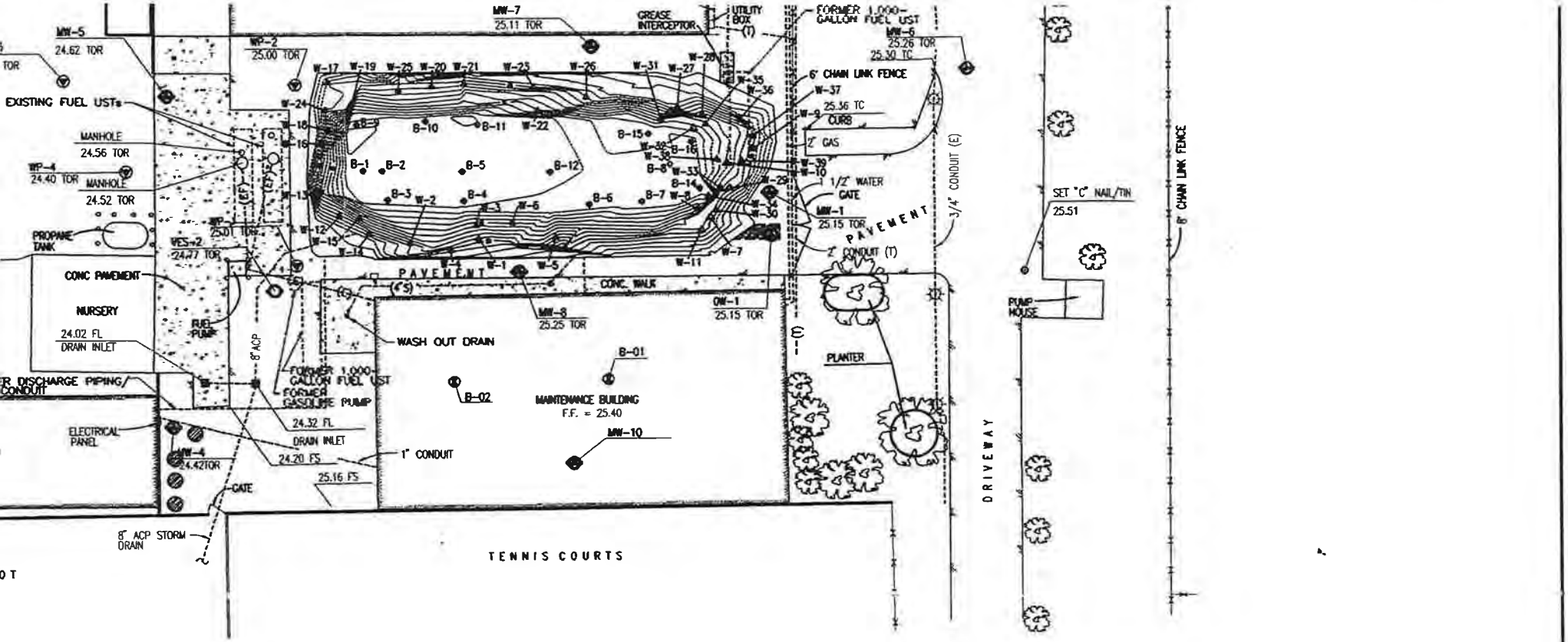
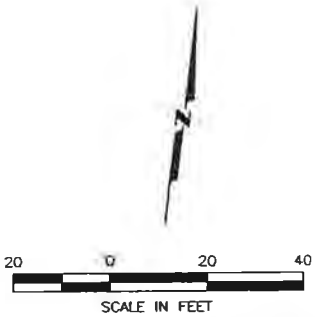
(714) 260-1800

Golden West College Maintenance Yard
Huntington Beach, California

PROPOSED REMEDIAL EXCAVATION PLAN

DRAWING: C-3
SHEET: 4 OF 8
REVISION NUMBER:
DATE: 4/96





EXPLANATION

W-1 ▲ APPROXIMATE LOCATION OF SOIL SAMPLE COLLECTED FROM EXCAVATION SIDEWALL	GROUNDWATER MONITORING WELL	CHAIN LINK FENCE
B-1 ● APPROXIMATE LOCATION OF SOIL SAMPLE COLLECTED FROM EXCAVATION BOTTOM	VAPOR EXTRACTION WELL	LANDSCAPE TREE
○ △ LOCATION UNDERWENT FURTHER EXCAVATION AFTER SAMPLE COLLECTION	RECOVERY WELL	EUCALYPTUS TREE
	HANDAUGER/WELL POINT	CENTER LINE
	BORING	T TELEPHONE CONDUIT
	GROUNDWATER TREATMENT TANKS	E ELECTRICAL CONDUIT
	EDGE OF PAVEMENT	EF ELECTRICAL AND FUEL CONDUIT
	PARKING LOT LIGHT	G GAS LINE
	POWER POLE	S SEWER LINE
	POWER POLE W/ GUY	SD STORM DRAIN
	GAS VALVE	TOR TOP OF RIM
	MONOPOLE	TC TOP OF CURB
	DRAIN	FS FINISH SURFACE
		FF FINISH FLOOR
		ACP ASBESTOS CEMENT PIPE

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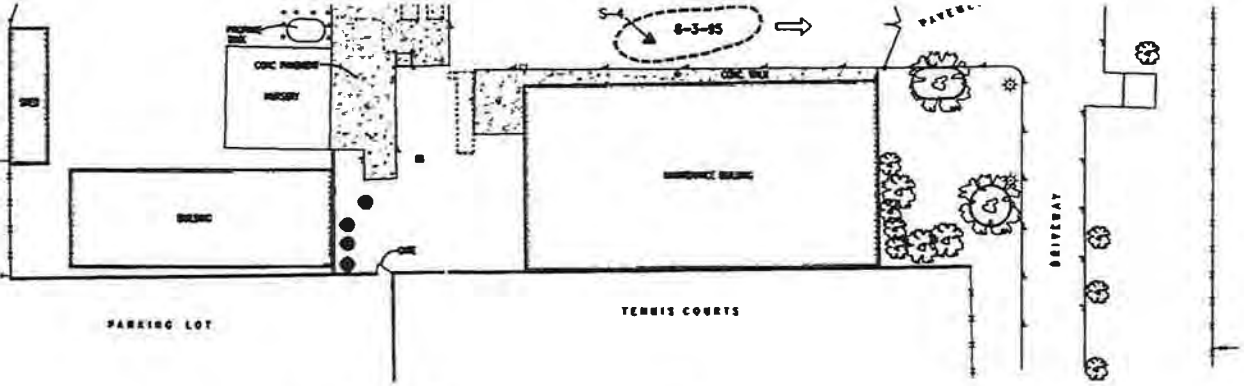
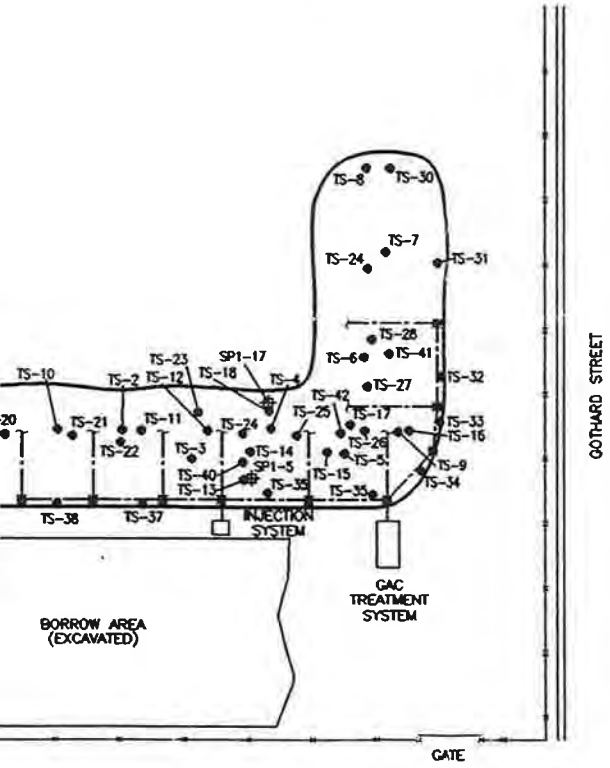
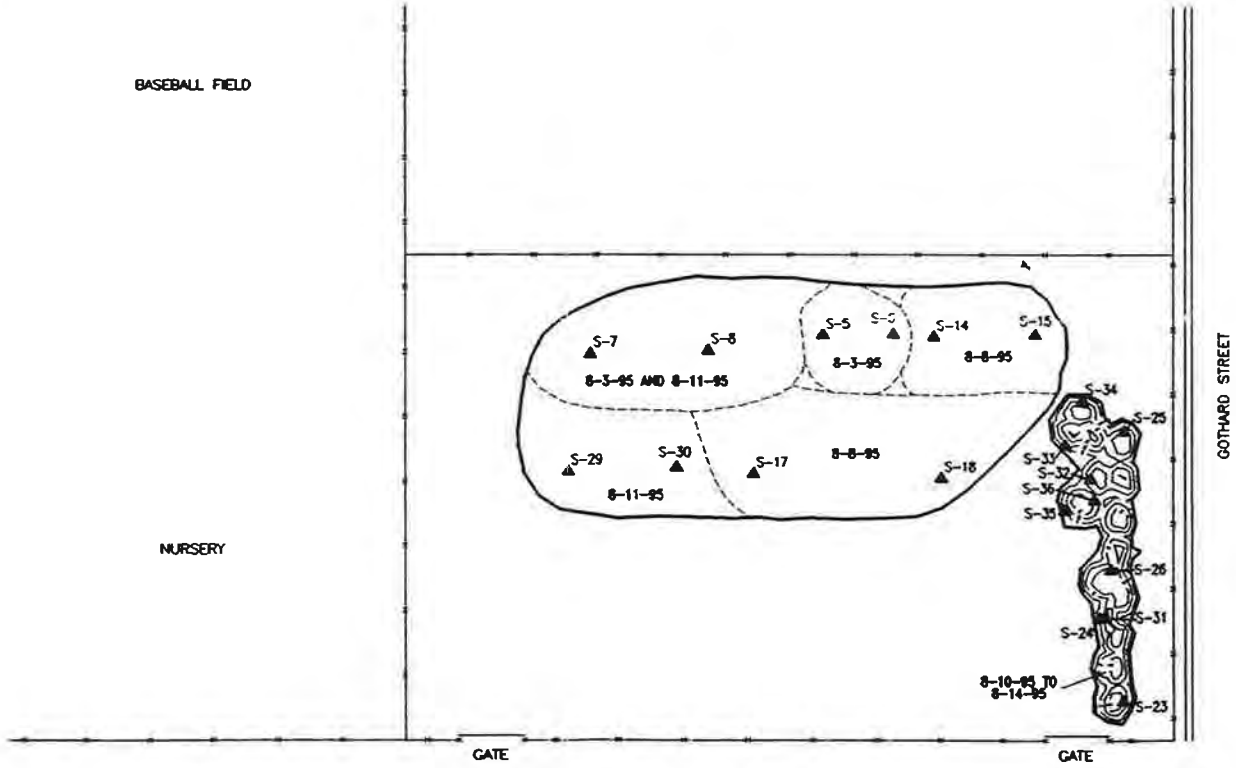
EXCAVATION PLAN WITH SOIL SAMPLE LOCATIONS

DRAWING: C-4
SHEET: 5 OF 8
REVISION NUMBER:
DATE: 2/96



MAINTENANCE YARD STOCKPILES
NOT TO SCALE





TMENT STOCKPILE
SCALE

TREATMENT /BORROW AREA STOCKPILES
NOT TO SCALE

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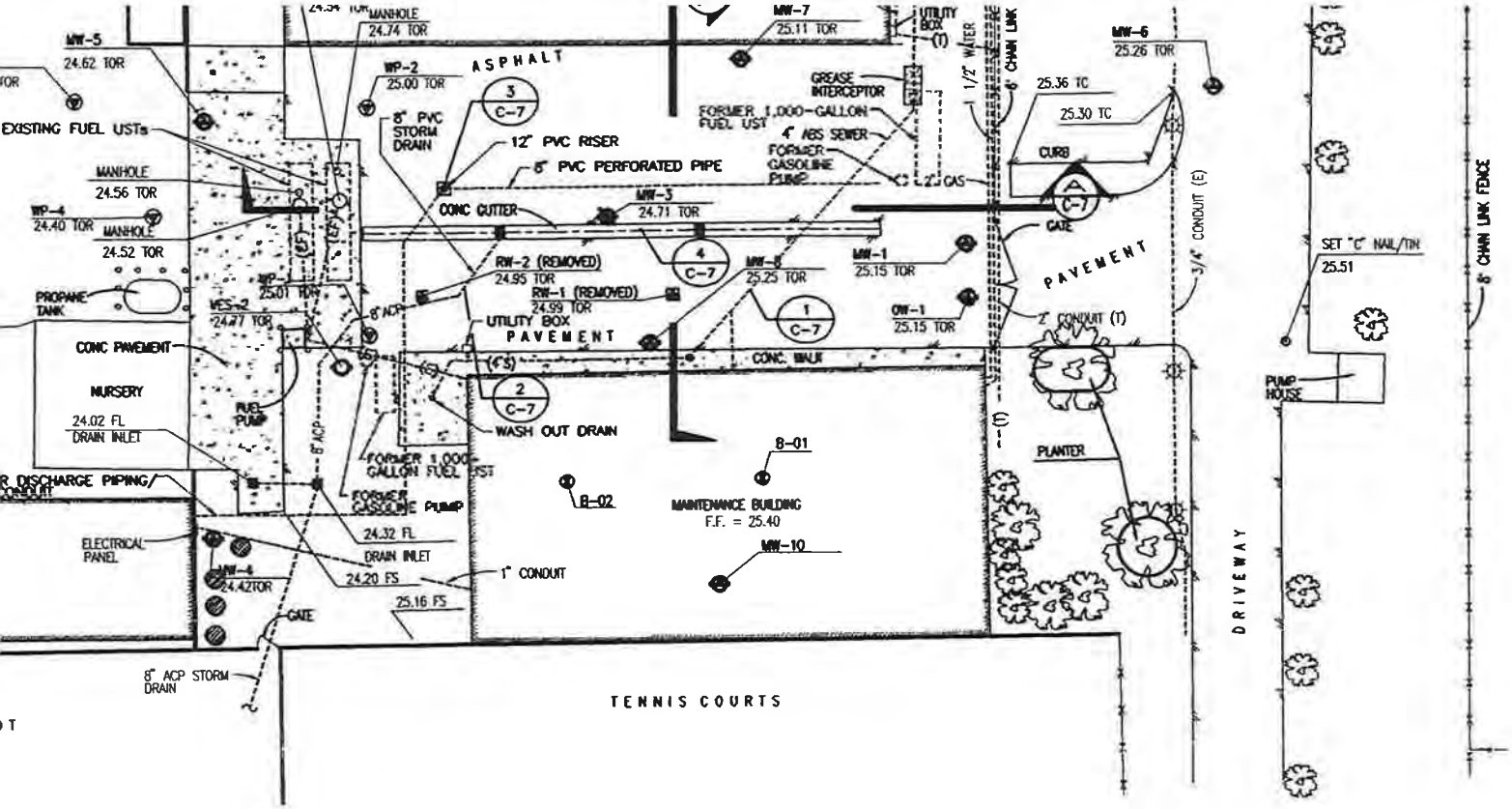
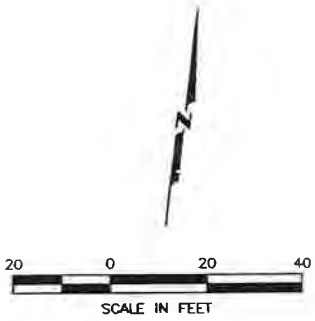
SOIL STOCKPILE SAMPLING LOCATIONS

DRAWING:	C-5
SHEET:	6 OF 8
REVISION NUMBER:	
DATE:	2/96





EXPLANATION

GROUNDWATER MONITORING WELL	CHAIN LINK FENCE
ABANDONED GROUNDWATER MONITORING WELL	LANDSCAPE TREE
VAPOR EXTRACTION WELL	EUCALYPTUS TREE
RECOVERY WELL	CENTER LINE
HANDAUGER/WELL POINT	T TELEPHONE CONDUIT
BORING	E ELECTRICAL CONDUIT
GROUNDWATER TREATMENT TANKS	EF ELECTRICAL AND FUEL CONDUIT
EDGE OF PAVEMENT	G GAS LINE
PARKING LOT LIGHT	S SEWER LINE
POWER POLE	SD STORM DRAIN
POWER POLE W/ GUY	TOR TOP OF RIM
GAS VALVE	TC TOP OF CURB
MONOPOLE	FS FINISH SURFACE
DRAIN	FF FINISH FLOOR
	ACP ASBESTOS CEMENT PIPE
	UST UNDERGROUND STORAGE TANKS

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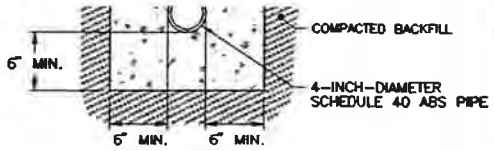
Golden West College Maintenance Yard
Huntington Beach, California

AS-BUILT SITE PLAN

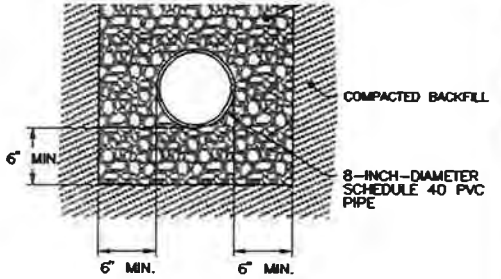
DRAWING: C-6
SHEET: 7 OF 8
REVISION NUMBER:
DATE: 2/96

20

ENT (AS-BUILT) A C-7



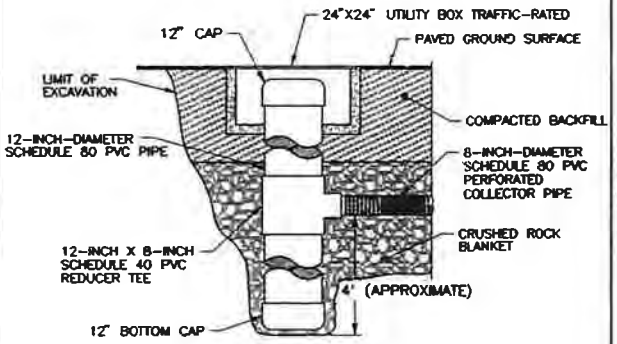
DETAIL: SEWER 1 C-7
NTS



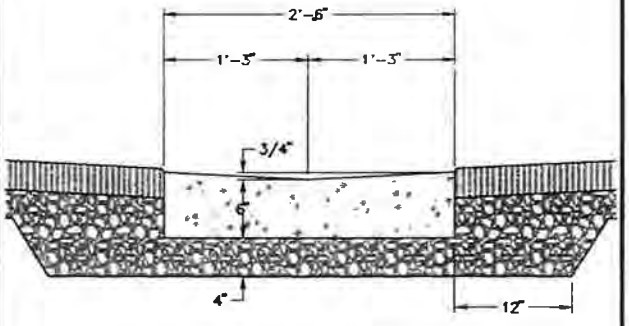
DETAIL: STORM DRAIN 2 C-7
NTS

EXPLANATION

MSL	MEAN SEA LEVEL
BGS	BELOW GROUND SURFACE
BOE	BOTTOM OF EXCAVATION (VARIES, MAXIMUM DEPTH APPROXIMATELY 14 FEET BGS)
▽	APPROXIMATE GROUNDWATER DEPTH



DETAIL: RISER PIPE 3 C-7
NTS



DETAIL: GUTTER 4 C-7
NTS

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Golden West College Maintenance Yard
Huntington Beach, California

AS-BUILT
SECTIONS AND DETAILS

DRAWING: C-7
SHEET: 8 OF 8
REVISION NUMBER:
DATE: 4/96

TABLE 1

LABORATORY ANALYSES OF SOIL SAMPLES[1] GOLDEN WEST COLLEGE MAINTENANCE YARD

Sample Number	Depth (feet)	Date Sampled	LABORATORY RESULTS (mg/kg - soil) Petroleum Hydrocarbons[2] Gasoline	Benzene[3]	Toluene	Ethyl Benzene	Xylenes	OVA Headspace[4] (mg/kg)
Soil								
MW1-1-3	5	5/25/88	<10.0	NA	NA	NA	NA	200
MW1-2-3	10	5/25/88	508.0	0.009	0.110	0.041	0.220	45
MW2-1	10	5/24/88	<10.0	NA	NA	NA	NA	NR
MW2-3-1	15	5/25/88	<10.0	0.025	0.009	0.002	0.012	1
MW3-1-2	5	5/24/88	<10.0	NA	NA	NA	NA	>1,000
MW3-2-2	10	5/24/88	<10.0	NA	NA	NA	NA	>1,000
MW4-1	5	1/16/89	<0.05	NA	NA	NA	NA	<1
MW4-3	10	1/16/89	<0.05	<0.001	<0.001	<0.001	<0.001	<1
MW5-2	8	1/16/89	<0.05	NA	NA	NA	NA	<1
MW5-3	10	1/16/89	<0.05	<0.001	<0.001	<0.001	<0.001	<1
MW6-3	10	1/16/89	<0.05	<0.001	<0.001	<0.001	<0.001	<1
MW7-1	5	4/11/90	<5.0	0.450	0.490	0.120	0.420	13
MW7-2	10	4/11/90	47.0	0.730	9.300	4.200	12.000	>66
MW8-1	5	4/11/90	<5.0	0.750	0.770	0.160	0.740	50
MW8-2	10	4/11/90	1,600.0	12.000	23.000	14.000	35.000	>66
MW9-2	10	4/11/90	<5.0	<0.005	<0.005	<0.005	0.009	<1
MW10-2	10	5/03/90	<5.0	<0.005	<0.005	<0.005	<0.005	<1
VES1-1	5	4/11/90	<5.0	0.021	0.096	0.019	0.230	33
VES1-2	10	4/11/90	40.0	1.300	6.200	1.700	4.400	46
VES2-2	10	4/11/90	<5.0	0.160	0.120	0.013	0.160	66
VES3-1	5	4/11/90	<5.0	0.250	0.380	0.050	0.200	25
VES3-2	10	4/11/90	930.0	1.700	2.600	0.670	1.600	38

1. Results for soil analyses are reported in milligrams per kilogram (mg/kg)
2. Petroleum hydrocarbons analyzed in general accordance with Modified EPA Method No. 8015.
3. Benzene, toluene, xylenes, and ethyl benzene were analyzed in general accordance with EPA Method No. 8020.
4. VOC's are measured in heated headspace apparatus.
5. NR - not recorded; NA - not analyzed

TABLE 2
LABORATORY ANALYSES
OF GROUNDWATER SAMPLES[1]
GOLDEN WEST COLLEGE MAINTENANCE YARD

Well Number	Ground-Water[2] Elevation	Date Sampled	Petroleum Hydrocarbons[3] Gasoline	LABORATORY RESULTS (mg/l - groundwater) Benzene[4]	Toluene	Ethyl Benzene	Xylenes	Free Prod. Thickness[5] (feet)
Groundwater								
MW1	15.59	5/25/88	180.0	2.900	11.000	5.300	31.000	0.0
MW1	NR	1/26/89	NA	NA	NA	NA	NA	3.0
MW1	NR	5/03/90	NA	NA	NA	NA	NA	>3.0
MW2	15.64	5/25/88	<0.01	0.001	0.002	0.001	0.003	0.0
MW2	15.32	1/26/89	<0.05	<0.0002	<0.0002	<0.0002	<0.0002	0.0
MW2	14.72	5/03/90	<1.0	<0.001	<0.001	<0.001	<0.001	0.0
MW3	15.26	5/25/88	83.0	15.000	18.000	2.900	14.000	0.0
MW3	NR	1/26/89	NA	NA	NA	NA	NA	4.0
MW3	NR	5/03/90	NA	NA	NA	NA	NA	>3.0
MW4	14.08	1/26/89	<0.05	<0.0002	<0.0002	<0.0002	<0.0002	
MW4	13.47	5/03/90	<1.0	0.003	<0.001	<0.001	<0.001	
MW5	14.48	1/26/89	<0.05	<0.0002	<0.0002	<0.0002	<0.0002	
MW5	13.86	5/03/90	<1.0	<0.001	<0.001	<0.001	<0.001	
MW6	15.33	1/26/89	<0.05	<0.0002	<0.0002	<0.0002	<0.0002	
MW6	14.76	5/03/90	<1.0	<0.001	<0.001	<0.001	<0.001	
MW7	14.26	5/03/90	5.3	0.360	0.085	<0.001	0.016	
MW8	NR	5/03/90	NA	NA	NA	NA	NA	>3.0
MW9	14.37	5/03/90	<1.0	<0.001	<0.001	<0.001	<0.001	
MW10	13.90	5/03/90	<1.0	<0.001	<0.001	<0.001	<0.001	
Regulatory Criteria (Groundwater)								
DOHS Action Levels[6]					0.100			
DOHS MCL's[7]				0.001		0.680	1.750	

NOTES:

1. Results for groundwter analyses are reported in milligrams per liter (mg/l)
2. Groundwater elevation in feet MSL.
3. Petroleum hydrocarbons analyzed in general accordance with Modified EPA Method No. 8015.
4. Benzene, toluene, xylenes, and ethyl benzene were analyzed in general accordance with EPA Method No. 602 (water).
5. Product thickness measured using teflon and acrylic bailers.
6. Department of Health Service Action Levels are health based criteria derived from toxicological data and including appropriate factors of safety. DOHS Action Levels are not enforceable drinking water standards, but, are levels at which the DOHS requires water surveyors to take corrective action to reduce the level of contamination in the water they supply.
7. MCL's are enforceable drinking water standards.
8. NR - not recorded; NA - not analyzed

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Environmental Health and Safety Specialists

Feasibility and Risk Analysis

Hazardous Waste Management and Monitoring

February 24, 2011

Ms. Geniece Higgins
Orange County Health Care Agency
Environmental Health Division
1241 East Dyer Road, Suite 120
Santa Ana, California 92705

RE: **Golden West College**
15744 Goldenwest Street
Huntington Beach, CA 92647
SEMI-ANNUAL STATUS REPORT
1st Quarter 2011
OCHCA Case #10UT004

Dear Ms. Higgins:

On behalf of the property owner, enclosed is a copy of the *Semi-Annual Status Report – 1st Quarter 2011*, dated February 24, 2011, prepared by Atlas Environmental Engineering, Inc. (ATLAS). As presented in the report, all associated groundwater wells were monitored during this event. ATLAS anticipates performing groundwater monitoring and sampling activities in all associated monitoring wells during the next semi-annual sampling event scheduled for 3rd Quarter 2011. If you have any questions, please contact me at (714) 890-7129.

Sincerely,
ATLAS ENVIRONMENTAL ENGINEERING, INC.

RECEIVED HCA
FEB 25 2011
ENVIRONMENTAL HLTH

Karl H. Kerner, P.E.
Senior Engineer/Project Manager

cc: Mr. Jerry Marchbank, Coast Community College Districts (w/1 enclosure)

GOLDEN WEST COLLEGE
SEMI-ANNUAL STATUS REPORT
1ST QUARTER 2011
FEBRAURY 24, 2011

SITE LOCATION:	15744 Goldenwest Street, Huntington Beach, CA 92647
RP:	Coast Community College Districts 1370 Adams Ave., Costa Mesa, CA 92626
CONTACT:	Mr. Jerry Marchbank
LEAD AGENCY:	Orange County Health Care Agency
AGENCY CONTACT:	Ms. Geniece Higgins (714) 433-6263
OCHCA CASE #:	10UT004

Site Activities this Quarter

- Quarterly groundwater monitoring and sampling were performed on January 6, 2011.
- Approximately 365 gallons of groundwater were purged prior to sampling wells.
- Purged water was placed in the on-site groundwater treatment system for subsequent proper disposal/discharge by the generator.
- All monitoring wells were monitored this quarter, as required by the OCHCA and as outlined in monitoring and sampling plan, summarized in **Table 5**.
- Additional (annual) historical groundwater analytical results are included in **Table 4**.
- Request for site closure.

Future Site Activities

- Continued semi-annual groundwater monitoring, sampling, and reporting duties in all monitoring wells during the 3rd Quarter 2011.
- Anticipate regulatory site closure approval.
- Anticipate well destruction activities, once site closure is approved.

Quarterly Summary

Total GW Monitoring Wells:	10		
GW Wells Gauged:	10		
GW Wells Sampled:	10		
Wells with Liquid Phase Hydrocarbons(LPH):	0		
Gallons of LPH Removed this Quarter:	0		
Gallons of LPH Removed to Date:	0		
Depth to Groundwater (feet):	5.14	to	7.75
Groundwater Elevation (feet):	17.16	to	21.26
Approximate Groundwater Gradient:	Southwest		
Approximate Groundwater Flow Direction:	0.02		
Consistent with Last Quarter:	Yes		

Analytical Summary

TPHg Concentrations	(µ g/L):	<50	to	53J
Benzene Concentrations	(µ g/L):	<0.5	to	4.3
Toluene Concentrations	(µ g/L):	<0.5	to	1.9
Ethylbenzene Concentrations	(µ g/L):	<0.5	to	7.5
Total Xylenes Concentrations	(µ g/L):	<1	to	4.5
MTBE (EPA 8260B) Concentrations	(µ g/L):	<1	to	2.5
ETBE concentrations	(µ g/L):	<1		
DIPE concentrations	(µ g/L):	<1		
TAME concentrations	(µ g/L):	<1		
TBA concentrations	(µ g/L):	<10		

J - Result is below the PQL, but above the MDL; Trace concentration.

Prepared by:

Jasmine F. Senn
Project Scientist

Reviewed by:

Karl H. Kerner, P.E.
Senior Engineer



Attachments

Figures

Figure 1 - Site Location Map
Figure 2 - Site Plan, Monitoring Wells
Figure 3 - Groundwater Elevation Contour Map
Figure 4 - TPHg Concentrations in Groundwater
Figure 5 - Benzene Concentrations in Groundwater
Figure 6 - MTBE Concentrations in Groundwater
Figure 7 - TBA Concentrations in Groundwater

Tables

Table 1 - Well Completion Details
Table 2 - Current Groundwater Analytical Data
Table 3 - Historical Groundwater Analytical Data
Table 4 - Historical Additional Groundwater Analytical Results
Table 5 - Groundwater Monitoring and Sampling Plan

Appendix A

Project Status Reports
Groundwater Sampling Procedures

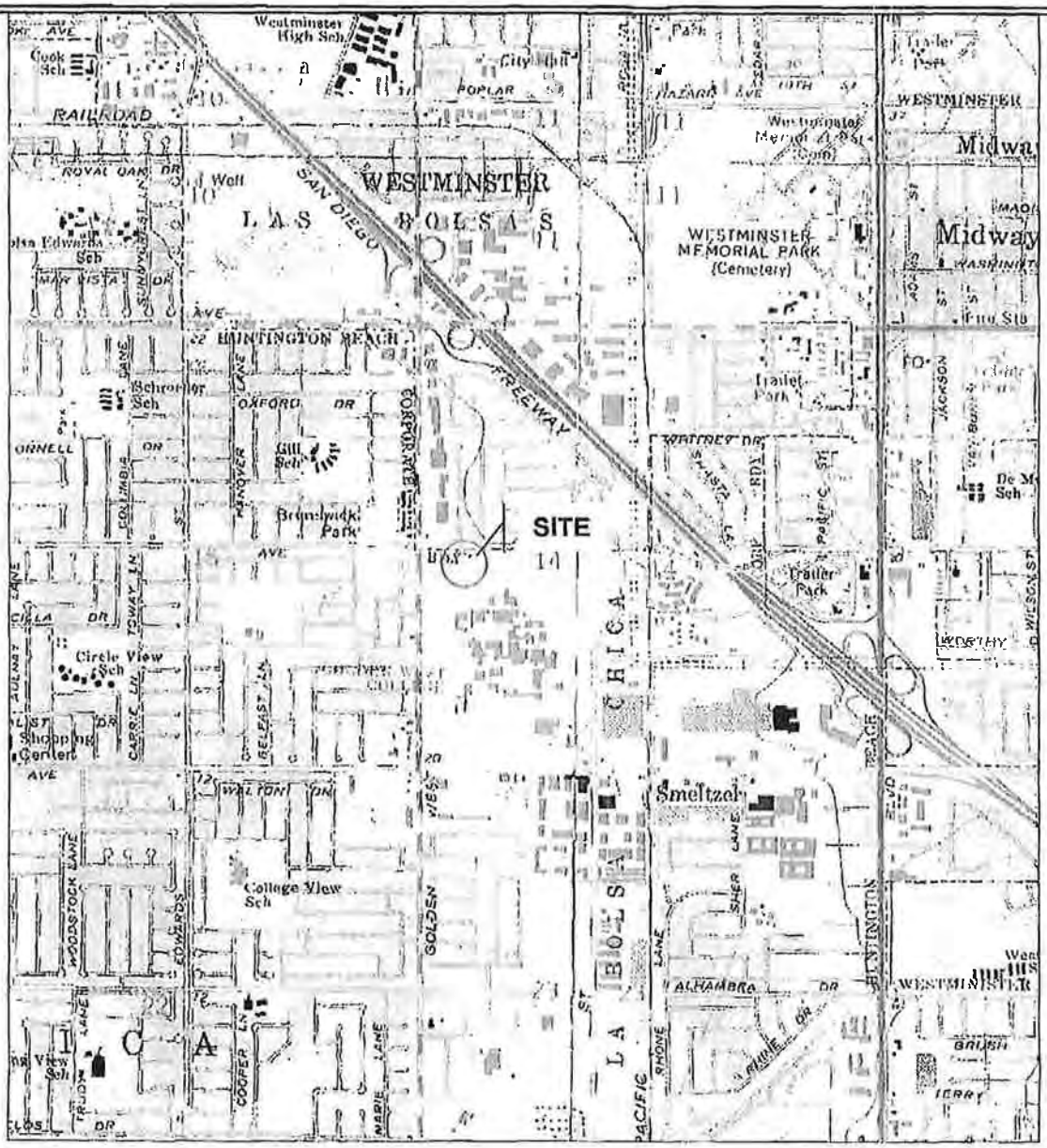
Appendix B

Laboratory Analytical Reports and Chain-of-Custody Documentation

Appendix C

Historical Groundwater Analytical Results

FIGURES



Map: 7.5' USGS Topographic Map Newport Beach Quadrangle
Date: <1965> (photorevised 1981)
Scale: 1: 25000

Atlas
3185 Airway Avenue
Suite D-1
Costa Mesa, CA 92626

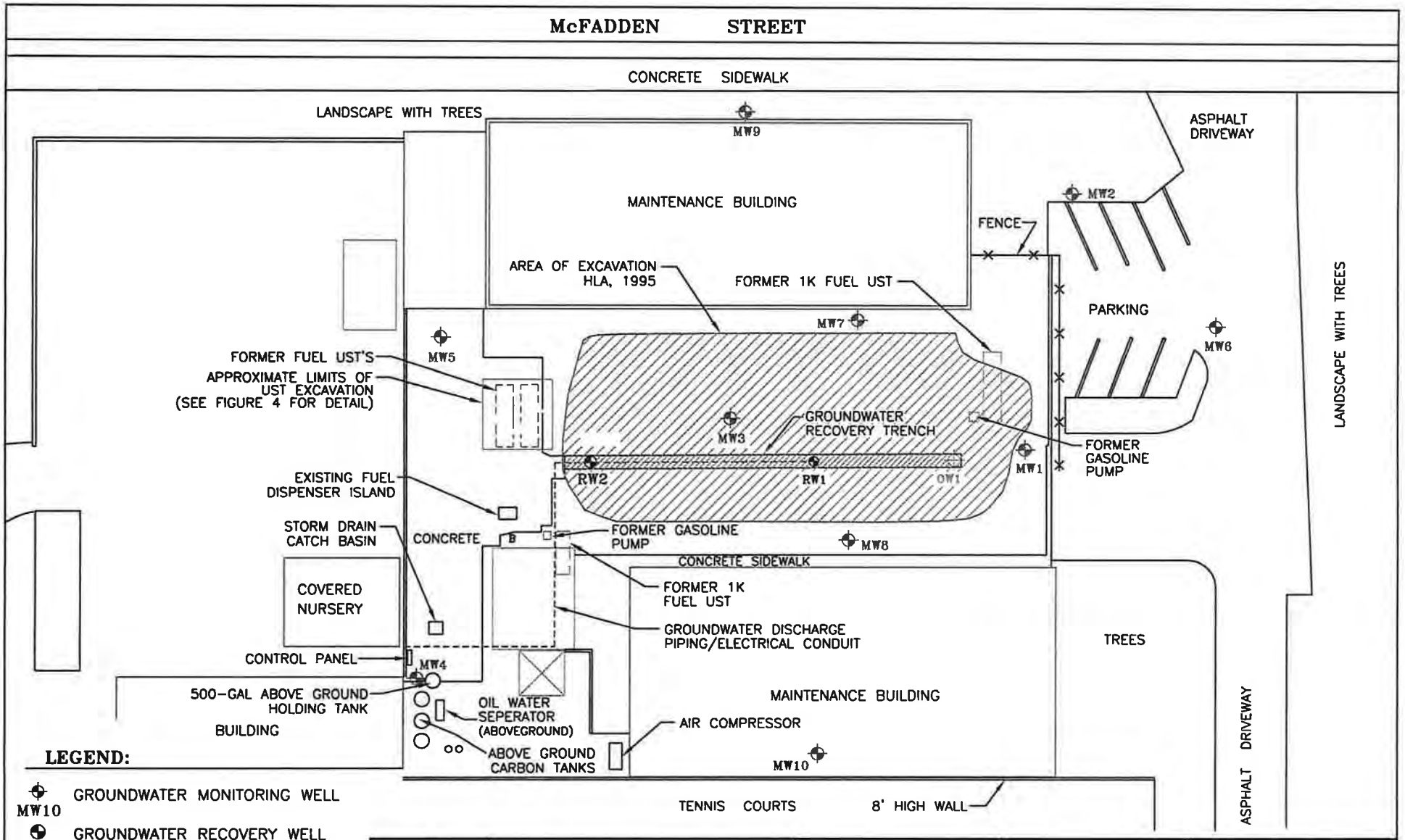
GOLDEN WEST COLLEGE (MAINTENANCE YARD)

15744 GOLDENWEST STREET
HUNTINGTON BEACH, CA

SITE VICINITY MAP

NORTH

FIGURE 1


McFADDEN STREET
CONCRETE SIDEWALK
LANDSCAPE WITH TREES
MW9
MAINTENANCE BUILDING
ASPHALT DRIVEWAY
MW2
FENCE
AREA OF EXCAVATION HLA, 1995
FORMER 1K FUEL UST
MW7
PARKING
MW6
LANDSCAPE WITH TREES
MW5
FORMER FUEL UST'S
APPROXIMATE LIMITS OF UST EXCAVATION (SEE FIGURE 4 FOR DETAIL)
GROUNDWATER RECOVERY TRENCH
MW3
FORMER GASOLINE PUMP
MW1
RW2
RW1
OW1
EXISTING FUEL DISPENSER ISLAND
STORM DRAIN CATCH BASIN
CONCRETE
FORMER GASOLINE PUMP
MW8
CONCRETE SIDEWALK
COVERED NURSERY
FORMER 1K FUEL UST
GROUNDWATER DISCHARGE PIPING/ELECTRICAL CONDUIT
TREES
CONTROL PANEL
MW4
500-GAL ABOVE GROUND HOLDING TANK
OIL WATER SEPERATOR (ABOVEGROUND)
MAINTENANCE BUILDING
BUILDING
AIR COMPRESSOR
ABOVE GROUND CARBON TANKS
MW10
ASPHALT DRIVEWAY
TENNIS COURTS
8' HIGH WALL
LEGEND:
MW10 GROUNDWATER MONITORING WELL
MW9 GROUNDWATER RECOVERY WELL
OW1 GROUNDWATER OBSERVATION WELL
NORTH
0 SCALE 40'
(APPROXIMATE DIMENSIONS)
Design By: ED DEE
Drawn By: ED DEE
Date: 02/20/2010
Rev.: 02/20/2011
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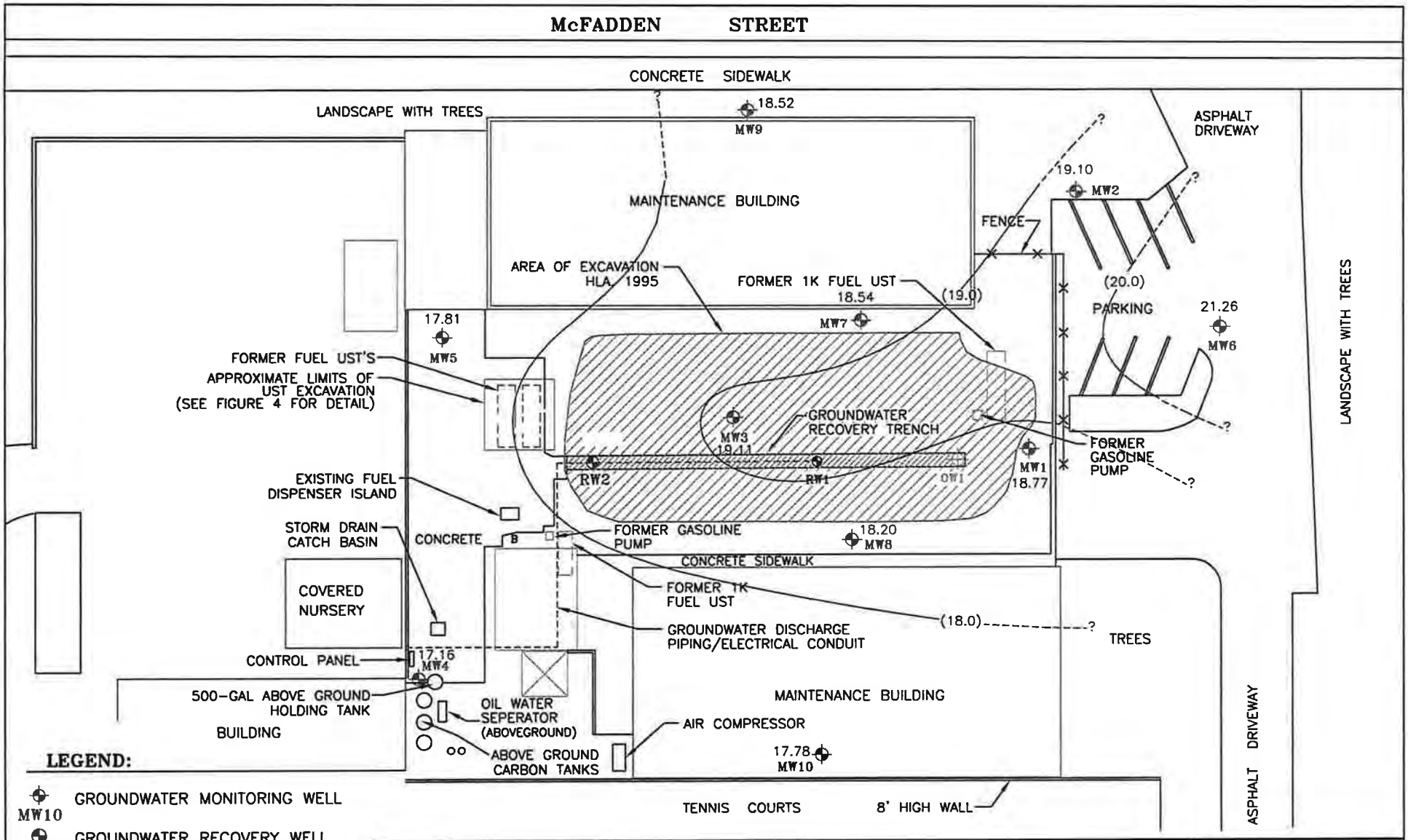
PHONE: (714) 850-7129
GOLDEN WEST COLLEGE MAINTENANCE YARD
15744 GOLDENWEST STREET
HUNTINGTON BEACH, CA
WELL LOCATIONS
DRAWING NUMBER: GWC-0111
FIGURE 2


McFADDEN STREET
CONCRETE SIDEWALK
LANDSCAPE WITH TREES
18.52
MW9
MAINTENANCE BUILDING
ASPHALT DRIVEWAY
19.10
MW2
FENCE
AREA OF EXCAVATION HLA 1995
FORMER 1K FUEL UST
18.54
MW7
(19.0)
(20.0)
PARKING
21.26
MW6
17.81
MW5
FORMER FUEL UST'S
APPROXIMATE LIMITS OF UST EXCAVATION (SEE FIGURE 4 FOR DETAIL)
GROUNDWATER RECOVERY TRENCH
MW3
19.11
RW2
RW1
OW1
MW1
18.77
FORMER GASOLINE PUMP
LANDSCAPE WITH TREES
EXISTING FUEL DISPENSER ISLAND
STORM DRAIN CATCH BASIN
CONCRETE
FORMER GASOLINE PUMP
18.20
MW8
CONCRETE SIDEWALK
COVERED NURSERY
FORMER 1K FUEL UST
(18.0)
GROUNDWATER DISCHARGE PIPING/ELECTRICAL CONDUIT
TREES
CONTROL PANEL
17.16
MW4
500-GAL ABOVE GROUND HOLDING TANK
OIL WATER SEPERATOR (ABOVEGROUND)
MAINTENANCE BUILDING
AIR COMPRESSOR
BUILDING
ABOVE GROUND CARBON TANKS
17.78
MW10
ASPHALT DRIVEWAY
TENNIS COURTS
8' HIGH WALL
LEGEND:
MW10 GROUNDWATER MONITORING WELL
MW9 GROUNDWATER RECOVERY WELL
OW1 GROUNDWATER OBSERVATION WELL
21.26 GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL (MSL) MEASURED ON 01/06/2011
(20.0) GROUNDWATER ELEVATION CONTOUR IN FEET ABOVE MASL (DASHED WHERE INFERRED)
NORTH
0 SCALE 40'
(APPROXIMATE DIMENSIONS)
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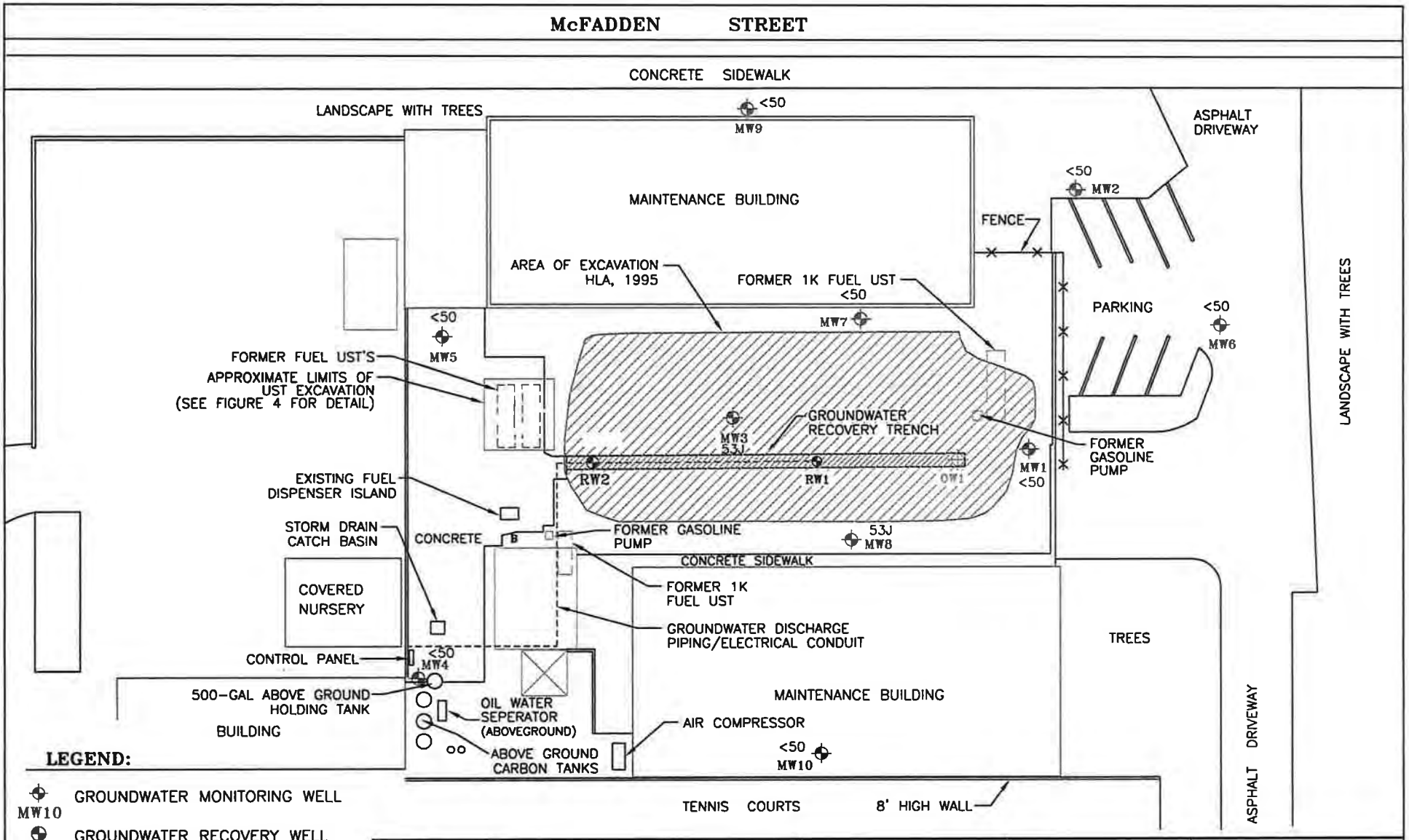
15744 GOLDENWEST STREET
HUNTINGTON BEACH, CA
GROUNDWATER ELEVATION CONTOUR MAP
DRAWING NUMBER: GWC-0111
FIGURE 3


McFADDEN STREET
CONCRETE SIDEWALK
LANDSCAPE WITH TREES
<50
MW9
MAINTENANCE BUILDING
ASPHALT DRIVEWAY
<50
MW2
FENCE
AREA OF EXCAVATION
HLA, 1995
FORMER 1K FUEL UST
<50
PARKING
<50
MW6
LANDSCAPE WITH TREES
<50
MW5
MW7
FORMER FUEL UST'S
APPROXIMATE LIMITS OF
UST EXCAVATION
(SEE FIGURE 4 FOR DETAIL)
GROUNDWATER
RECOVERY TRENCH
MW3
53J
FORMER
GASOLINE
PUMP
RW2
RW1
OW1
MW1
<50
EXISTING FUEL
DISPENSER ISLAND
STORM DRAIN
CATCH BASIN
CONCRETE
FORMER GASOLINE
PUMP
53J
MW8
CONCRETE SIDEWALK
COVERED
NURSERY
FORMER 1K
FUEL UST
GROUNDWATER DISCHARGE
PIPING/ELECTRICAL CONDUIT
TREES
CONTROL PANEL
<50
MW4
500-GAL ABOVE GROUND
HOLDING TANK
OIL WATER
SEPERATOR
(ABOVEGROUND)
MAINTENANCE BUILDING
BUILDING
AIR COMPRESSOR
ABOVE GROUND
CARBON TANKS
<50
MW10
ASPHALT DRIVEWAY
TENNIS COURTS
8' HIGH WALL
LEGEND:
MW10 GROUNDWATER MONITORING WELL
MW9 GROUNDWATER RECOVERY WELL
OW1 GROUNDWATER OBSERVATION WELL
53J TPHg CONCENTRATION IN PARTS PER BILLION (ppb), 01/06/2011
<50 LESS THAN LABORATORY DECTECTION LIMITS
J RESULT IS BETWEEN THE RL AND THE MDL; TRACE CONCENTRATION
NORTH
0 SCALE 40'
(APPROXIMATE DIMENSIONS)
Design By: ED DEE
Drawn By: ED DEE
Date: 02/20/2010
Rev.: 02/20/2011
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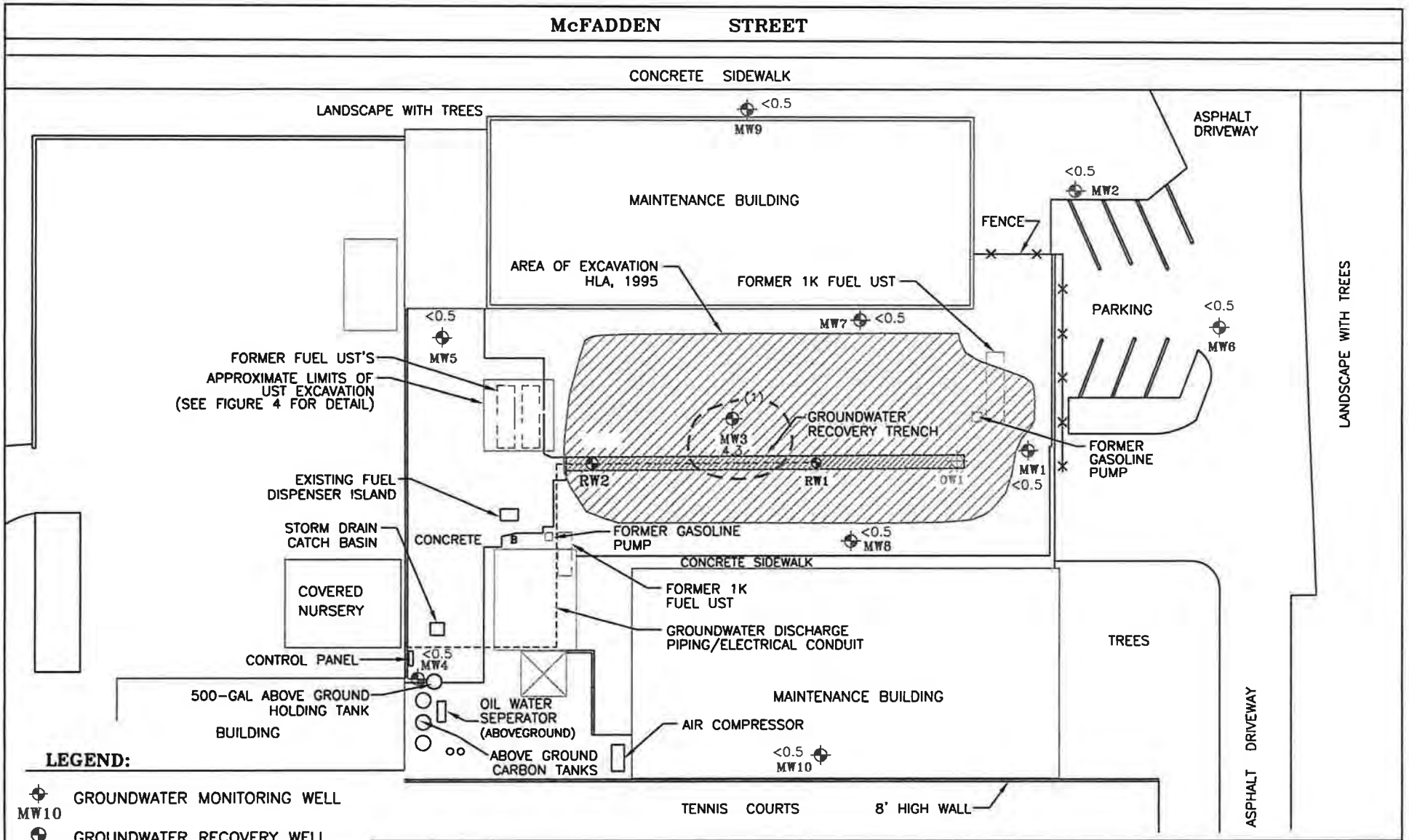
GOLDEN WEST COLLEGE
MAINTENANCE YARD
15744 GOLDENWEST STREET
HUNTINGTON BEACH, CA
TPHg
CONCENTRATIONS
IN GROUNDWATER
DRAWING NUMBER:
GWC-0111
FIGURE 4


McFADDEN STREET
CONCRETE SIDEWALK
LANDSCAPE WITH TREES
<0.5 MW9
ASPHALT DRIVEWAY
MAINTENANCE BUILDING
<0.5 MW2
FENCE
AREA OF EXCAVATION HLA, 1995
FORMER 1K FUEL UST
PARKING
<0.5 MW6
LANDSCAPE WITH TREES
<0.5 MW5
MW7 <0.5
FORMER FUEL UST'S
APPROXIMATE LIMITS OF UST EXCAVATION (SEE FIGURE 4 FOR DETAIL)
(1)
MW3 4.3
GROUNDWATER RECOVERY TRENCH
RW2
RW1
OW1
MW1 <0.5
FORMER GASOLINE PUMP
EXISTING FUEL DISPENSER ISLAND
STORM DRAIN CATCH BASIN
CONCRETE
FORMER GASOLINE PUMP
<0.5 MW8
CONCRETE SIDEWALK
COVERED NURSERY
FORMER 1K FUEL UST
GROUNDWATER DISCHARGE PIPING/ELECTRICAL CONDUIT
TREES
CONTROL PANEL
<0.5 MW4
500-GAL ABOVE GROUND HOLDING TANK
OIL WATER SEPERATOR (ABOVEGROUND)
MAINTENANCE BUILDING
BUILDING
AIR COMPRESSOR
ABOVE GROUND CARBON TANKS
<0.5 MW10
ASPHALT DRIVEWAY
TENNIS COURTS
8' HIGH WALL
LEGEND:
MW10 GROUNDWATER MONITORING WELL
MW9 GROUNDWATER RECOVERY WELL
OW1 GROUNDWATER OBSERVATION WELL
4.3 BENZENE CONCENTRATION IN PARTS PER BILLION (ppb), 01/06/2011
<0.5 LESS THAN LABORATORY DECTECTION LIMITS
?~~(1) BENZENE ISO-CONCENTRATION CONTOUR IN ppb (DASHED WHERE INFERRED)
NORTH
0 SCALE 40'
(APPROXIMATE DIMENSIONS)
Design By: ED DEE
Drawn By: ED DEE
Date: 02/20/2010
Rev.: 02/20/2011
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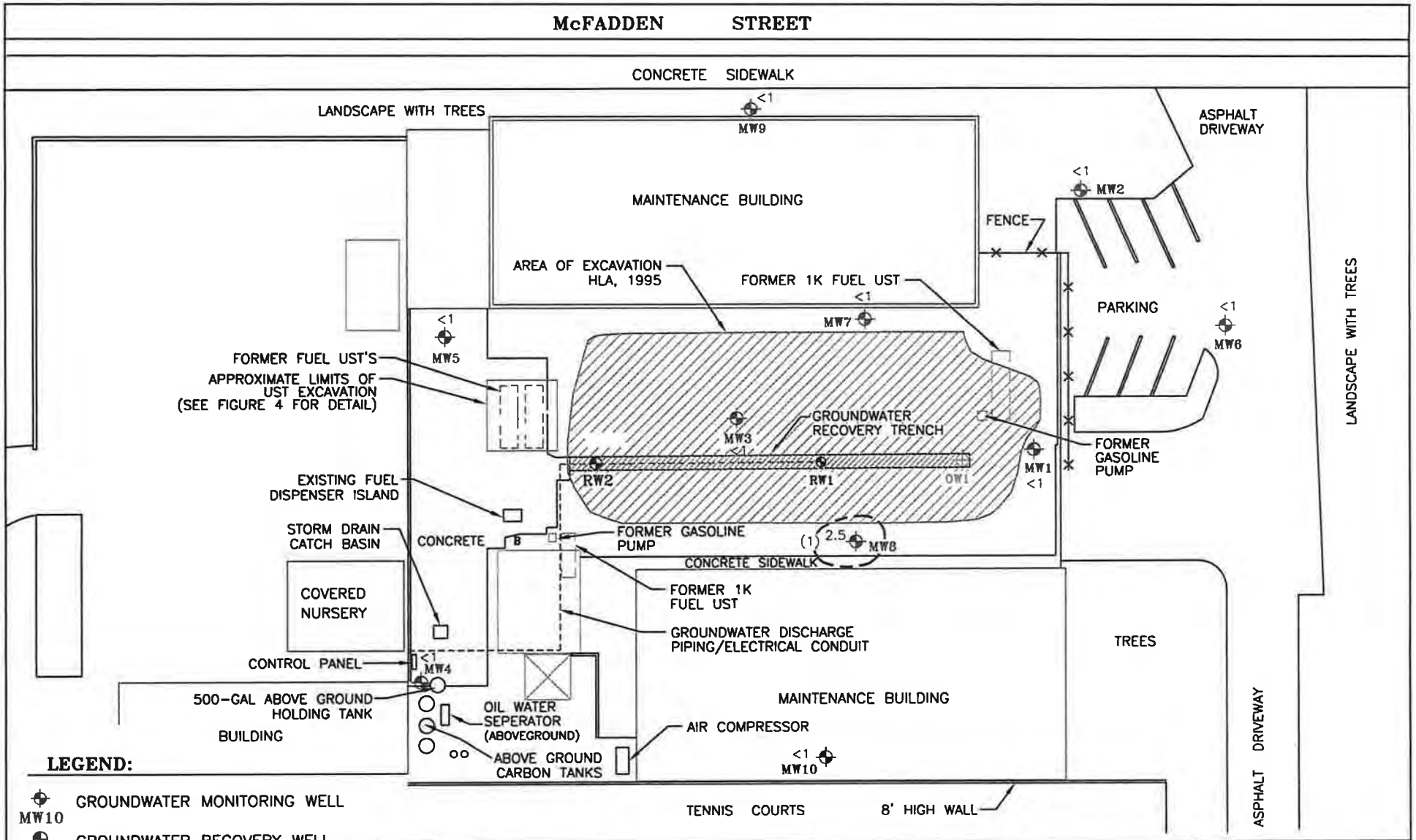
15744 GOLDENWEST STREET
HUNTINGTON BEACH, CA
BENZENE CONCENTRATIONS IN GROUNDWATER
DRAWING NUMBER: GWC-0111
FIGURE 5



Design By: ED DEE	Drawn By: ED DEE	Date: 02/20/2010	Rev.: 02/20/2011

NORTH

SCALE 0 40' (APPROXIMATE DIMENSIONS)

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- Environmental Products and Services
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- Hazardous Waste Management

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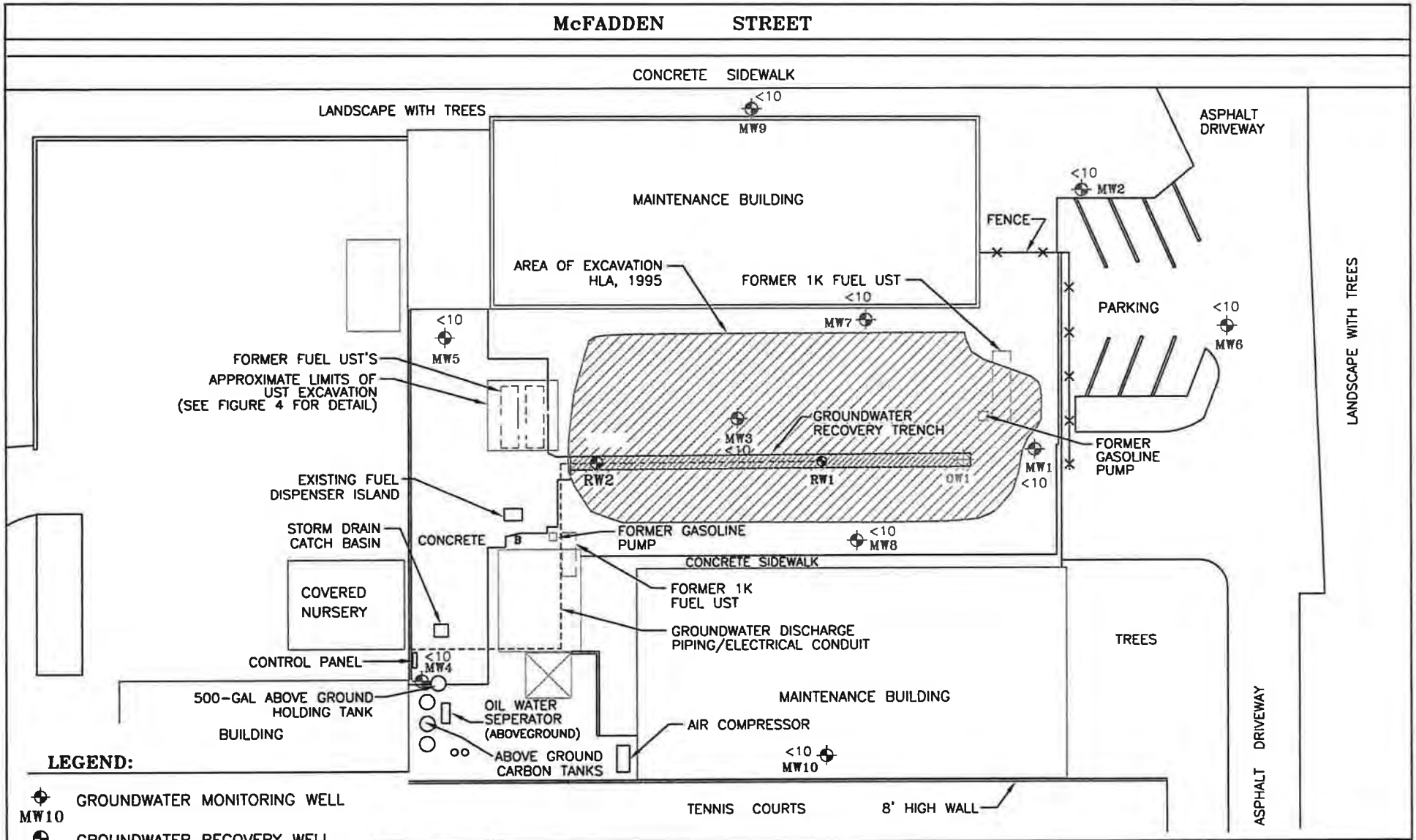
GOLDEN WEST COLLEGE MAINTENANCE YARD

15744 GOLDENWEST STREET
HUNTINGTON BEACH, CA

MTBE CONCENTRATIONS IN GROUNDWATER

DRAWING NUMBER: GWC-0111

FIGURE 6


McFADDEN STREET
CONCRETE SIDEWALK
LANDSCAPE WITH TREES
<10 MW9
MAINTENANCE BUILDING
ASPHALT DRIVEWAY
<10 MW2
FENCE
AREA OF EXCAVATION HLA, 1995
FORMER 1K FUEL UST
<10 MW7
PARKING
<10 MW6
LANDSCAPE WITH TREES
<10 MW5
FORMER FUEL UST'S
APPROXIMATE LIMITS OF UST EXCAVATION (SEE FIGURE 4 FOR DETAIL)
GROUNDWATER RECOVERY TRENCH
MW3 <10
RW2
RW1
OW1
MW1 <10
FORMER GASOLINE PUMP
EXISTING FUEL DISPENSER ISLAND
STORM DRAIN CATCH BASIN
CONCRETE
FORMER GASOLINE PUMP
<10 MW8
CONCRETE SIDEWALK
COVERED NURSERY
FORMER 1K FUEL UST
GROUNDWATER DISCHARGE PIPING/ELECTRICAL CONDUIT
TREES
CONTROL PANEL
<10 MW4
500-GAL ABOVE GROUND HOLDING TANK
OIL WATER SEPERATOR (ABOVEGROUND)
MAINTENANCE BUILDING
AIR COMPRESSOR
BUILDING
ABOVE GROUND CARBON TANKS
<10 MW10
ASPHALT DRIVEWAY
TENNIS COURTS
8' HIGH WALL
LEGEND:
MW10 GROUNDWATER MONITORING WELL
MW9 GROUNDWATER RECOVERY WELL
OW1 GROUNDWATER OBSERVATION WELL
<10 TBA CONCENTRATION IN PARTS PER BILLION (ppb), 01/06/2011
<10 LESS THAN LABORATORY DECTECTION LIMITS
NORTH
0 SCALE 40'
(APPROXIMATE DIMENSIONS)
Design By: ED DEE
Drawn By: ED DEE
Date: 02/20/2010
Rev.: 02/20/2011
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15744 GOLDENWEST STREET
HUNTINGTON BEACH, CA
TBA CONCENTRATIONS IN GROUNDWATER
DRAWING NUMBER: GWC-0111
FIGURE 7

TABLES

TABLE 1 - WELL COMPLETION DETAILS

GOLDEN WEST COLLEGE

HUNTINGTON BEACH, CA

Well	Well Type	Well Dia.	Bottom of Boring (ft)	Bottom of Well (ft)	Bottom of Screen (ft)	Top of Screen (ft)	Bottom of Seal (ft)	Top of Seal (ft)	SWE (ft)
MW-1	MW	3	21.5	20	20	5	3	1	24.75
MW-2	MW	4	26.5	23.5	23.5	3.5	3	1	24.97
MW-3	MW	10	26.5	25	25	5	4	1	24.25
MW-4	MW	4	21	20	20	5	3	1	24.01
MW-5	MW	4	21	18	18	3	3	1	24.21
MW-6	MW	4	21	20	20	5	3	1	26.47
MW-7	MW	4	21	20.5	20.5	5.5	4	1	24.46
MW-8	MW	4	21	20.5	20.5	5.5	4	1	24.60
MW-9	MW	4	21	20.5	20.5	5.5	4	1	23.83
MW-10	MW	2	19	18	18	8	6	1	25.53

NS - Not Surveyed

SWE - Surveyed Well Elevation

MW - Groundwater Monitoring Well.

VW - Vapor Recovery Well.

AB - Well Abandoned

SP - Sparge Well.

TABLE 2 - CURRENT GROUNDWATER ANALYTICAL DATA

GOLDEN WEST COLLEGE

HUNTINGTON BEACH, CA

(Concentration, µg/L)

Well	Date	SWE	DTW	PT	E-WATER	TPHg	Benzene	Toluene	E-Benzene	Xylenes	MTBE	MTBE (8260)	ETBE	DIPE	TAME	TBA
MW-1	1/6/2011	24.75	5.98	0.00	18.77	<50	<0.5	1.9	1.4	4.5	–	<1	<1	<1	<1	<10
MW-2	1/6/2011	24.97	5.87	0.00	19.10	<50	<0.5	<0.5	<0.5	<1	–	<1	<1	<1	<1	<10
MW-3	1/6/2011	24.25	5.14	0.00	19.11	53J	4.3	<0.5	7.5	2.7	–	<1	<1	<1	<1	<10
MW-4	1/6/2011	24.01	6.85	0.00	17.16	<50	<0.5	<0.5	<0.5	<1	–	<1	<1	<1	<1	<10
MW-5	1/6/2011	24.21	6.40	0.00	17.81	<50	<0.5	<0.5	<0.5	<1	–	<1	<1	<1	<1	<10
MW-6	1/6/2011	26.47	5.21	0.00	21.26	<50	<0.5	<0.5	<0.5	<1	–	<1	<1	<1	<1	<10
MW-7	1/6/2011	24.46	5.92	0.00	18.54	<50	<0.5	<0.5	<0.5	<1	–	<1	<1	<1	<1	<10
MW-8	1/6/2011	24.60	6.40	0.00	18.20	53J	<0.5	<0.5	2.6	<1	–	2.5	<1	<1	<1	<10
MW-9	1/6/2011	23.83	5.31	0.00	18.52	<50	<0.5	<0.5	<0.5	<1	–	<1	<1	<1	<1	<10
MW-10	1/6/2011	25.53	7.75	0.00	17.78	<50	<0.5	<0.5	<0.5	<1	–	<1	<1	<1	<1	<10

SWE - Surveyed Well Elevation

DTW - Depth To Water

PT - Product Thickness (apparent)

E-Water - Groundwater elevation

– - Not analyzed

µg/L - Micrograms per Liter

L - Larger Sample volume is used to achieve Lower Detection Limits

S - TPHg result was 14,700 ppb; chromatogram does not match that of the TPHg standard.

TPHg - Total Petroleum Hydrocarbons (gasoline), EPA 8015M

TPHd - Total Petroleum Hydrocarbons (diesel), EPA 8015M

MTBE - Methyl tert-Butyl ether

< - Less than laboratory detection limits

NA - Not Available

TAME - tert-Amyl Methyl ether

DIPE - Di-isopropyl ether

ETBE - Ethyl tert-Butyl ether

LPH - Liquid-Phase Hydrocarbons

* - Suspected Gauging Error

+ - Duplicate sample

‡ - Groundwater Sampled on Alternate Days

** - Obtained from Higher Dilution

J - Result is between the RL and the MDL; trace concentration

TABLE 3- HISTORICAL GROUNDWATER ANALYTICAL DATA

GOLDEN WEST COLLEGE

HUNTINGTON BEACH, CA

(Concentration, µ g/L)

Well	Date	SWE	DTW	PT	E-WATER	TPHg	Benzene	Toluene	E-Benzene	Xylenes	MTBE	MTBE (8260)	ETBE	DIPE	TAME	TBA
MW-1	5/20/2010	24.75	8.59	0.00	16.16	<50	<0.5	<0.5	<0.5	<1	--	<1	<1	<1	<1	<10
MW-1	1/6/2011	24.75	5.98	0.00	18.77	<50	<0.5	1.9	1.4	4.5	--	<1	<1	<1	<1	<10
MW-2	5/20/2010	24.97	8.56	0.00	16.41	<50	<0.5	<0.5	<0.5	<1	--	<1	<1	<1	<1	<10
MW-2	1/6/2011	24.97	5.87	0.00	19.10	<50	<0.5	<0.5	<0.5	<1	--	<1	<1	<1	<1	<10
MW-3	5/20/2010	24.25	7.50	0.00	16.75	340	31.0	<0.5	0.6J	<1	--	<1	<1	<1	<1	<10
MW-3	1/6/2011	24.25	5.14	0.00	19.11	53J	4.3	<0.5	7.5	2.7	--	<1	<1	<1	<1	<10
MW-4	5/20/2010	24.01	8.80	0.00	15.21	<50	<0.5	<0.5	<0.5	<1	--	3.4	<1	<1	<1	94.4
MW-4	1/6/2011	24.01	6.85	0.00	17.16	<50	<0.5	<0.5	<0.5	<1	--	<1	<1	<1	<1	<10
MW-5	5/20/2010	24.21	8.45	0.00	15.76	<50	<0.5	<0.5	<0.5	<1	--	<1	<1	<1	<1	<10
MW-5	1/6/2011	24.21	6.40	0.00	17.81	<50	<0.5	<0.5	<0.5	<1	--	<1	<1	<1	<1	<10
MW-6	5/20/2010	26.47	8.25	0.00	18.22	<50	<0.5	<0.5	<0.5	<1	--	<1	<1	<1	<1	<10
MW-6	1/6/2011	26.47	5.21	0.00	21.26	<50	<0.5	<0.5	<0.5	<1	--	<1	<1	<1	<1	<10
MW-7	5/20/2010	24.46	8.52	0.00	15.94	<50	<0.5	<0.5	<0.5	<1	--	<1	<1	<1	<1	<10
MW-7	1/6/2011	24.46	5.92	0.00	18.54	<50	<0.5	<0.5	<0.5	<1	--	<1	<1	<1	<1	<10

SWE - Surveyed Well Elevation
DTW - Depth To Water
PT - Product Thickness (apparent)
E-Water - Groundwater elevation
-- - Not analyzed
µ g/L - Micrograms per Liter
L - Larger Sample volume is used to achieve Lower Detection Limits
S - TPHg result was 14,700 ppb; chromatogram does not match that of the TPHg standard.

TPHg - Total Petroleum Hydrocarbons (gasoline), EPA 8015M
TPHd - Total Petroleum Hydrocarbons (diesel), EPA 8015M
MTBE - Methyl tert-Butyl ether
< - Less than laboratory detection limits
NA - Not Available
TAME - tert-Amyl Methyl ether

DIPE - Di-isopropyl ether
ETBE - Ethyl tert-Butyl ether
LPH - Liquid-Phase Hydrocarbons
• - Suspected Gauging Error
+ - Duplicate sample
‡ - Groundwater Sampled on Alternate Days
** - Obtained from Higher Dilution
J - Result is between the RL and the MDL; trace concentration

TABLE 3- HISTORICAL GROUNDWATER ANALYTICAL DATA

GOLDEN WEST COLLEGE

HUNTINGTON BEACH, CA

(Concentration, µg/L)

Well	Date	SWE	DTW	PT	E-WATER	TPHg	Benzene	Toluene	E-Benzene	Xylenes	MTBE	MTBE (8260)	ETBE	DIPE	TAME	TBA
MW-8	5/20/2010	24.60	8.70	0.00	15.90	64.J	<0.5	<0.5	<0.5	<1	--	1.2J	<1	<1	<1	<10
MW-8	1/6/2011	24.60	6.40	0.00	18.20	53J	<0.5	<0.5	2.6	<1	--	2.5	<1	<1	<1	<10
MW-9	5/20/2010	23.83	7.70	0.00	16.13	<50	<0.5	<0.5	<0.5	<1	--	<1	<1	<1	<1	<10
MW-9	1/6/2011	23.83	5.31	0.00	18.52	<50	<0.5	<0.5	<0.5	<1	--	<1	<1	<1	<1	<10
MW-10	5/20/2010	25.53	9.75	0.00	15.78	<50	<0.5	<0.5	<0.5	<1	--	<1	<1	<1	<1	<10
MW-10	1/6/2011	25.53	7.75	0.00	17.78	<50	<0.5	<0.5	<0.5	<1	--	<1	<1	<1	<1	<10

SWE - Surveyed Well Elevation
DTW - Depth To Water
PT - Product Thickness (apparent)
E-Water - Groundwater elevation
-- - Not analyzed
µg/L - Micrograms per Liter
L - Larger Sample volume is used to achieve Lower Detection Limits
S - TPHg result was 14,700 ppb; chromatogram does not match that of the TPHg standard.

TPHg - Total Petroleum Hydrocarbons (gasoline), EPA 8015M
TPHd - Total Petroleum Hydrocarbons (diesel), EPA 8015M
MTBE - Methyl tert-Butyl ether
< - Less than laboratory detection limits
NA - Not Available
TAME - tert-Amyl Methyl ether

DIPE - Di-isopropyl ether
ETBE - Ethyl tert-Butyl ether
LPH - Liquid-Phase Hydrocarbons
* - Suspected Gauging Error
+ - Duplicate sample
‡ - Groundwater Sampled on Alternate Days
** - Obtained from Higher Dilution
J - Result is between the RL and the MDL; trace concentration

TABLE 4
ADDITIONAL GROUNDWATER ANALYTICAL RESULTS
GOLDEN WEST COLLEGE
HUNTINGTON BEACH, CALIFORNIA
(Concentrations in ug/L or ppb)

		EPA method 8260B								
Sample ID	Date	Isopropylbenzene	n-Propylbenzene	Sec-Butylbenzene	n-Butylbenzene	Naphthalene	cis-1,2-Dichloroethene	Trichloroethene	Tetrachloroethene	1,2,4-Trimethylbenzene
MW-1	5/20/2010	**7.5**	**12.0**	<1.0	<1.0	<1.0	<1.0	-	-	-
	1/6/2011	**3.3J**	**7.3**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**1.5J**
MW-2	5/20/2010	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-
	1/6/2011	<1.0	<1.0	<1.0	<1.0	<1.0	**2.9J**	**1.5J**	<1.0	<1.0
MW-3	5/20/2010	**9.6**	**12.2**	**1.3J**	**1.1J**	<1.0	**10.0**	-	-	-
	1/6/2011	<1.0	**1.2J**	<1.0	<1.0	**1.5J**	**10.3**	<1.0	<1.0	<1.0
MW-4	5/20/2010	<1.0	<1.0	<1.0	<1.0	**6.3**	<1.0	-	-	-
	1/6/2011	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-5	5/20/2010	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-
	1/6/2011	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-6	5/20/2010	<1.0	<1.0	<1.0	<1.0	<1.0	**1.5J**	-	-	-
	1/6/2011	<1.0	<1.0	<1.0	<1.0	<1.0	**16.6**	**6.5**	**1.8J**	<1.0
MW-7	5/20/2010	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-
	1/6/2011	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-8	5/20/2010	**0.8J**	**1.0J**	<1.0	<1.0	**1.1J**	<1.0	-	-	-
	1/6/2011	**6.5**	**12.4**	<1.0	<1.0	**1.2J**	<1.0	<1.0	<1.0	<1.0
MW-9	5/20/2010	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-
	1/6/2011	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-10	5/20/2010	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	-
	1/6/2011	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

TES:

- Less than laboratory detection limit stated
- Not Analyzed
- Obtained from a higher dilution analysis
- micrograms per Liter, ppb
- Trace concentration, result is between DF X MDL & DF X PQL

TPHd - Total Petroleum Hydrocarbons, diesel
TPHg - Total Petroleum Hydrocarbons, gasoline
MTBE - Methyl tert-Butyl Ether
TBA - tert-Butyl Alcohol
ETBE - Ethyl tert-butyl ether
TAME - tert-Amyl Methyl ether

TABLE 5
GROUNDWATER MONITORING AND SAMPLING PLAN
GOLDENWEST COLLEGE
15744 GOLDENWEST STREET
HUNTINGTON BEACH, CALIFORNIA

WELL I.D.	MONITORING PERIOD			
	1ST QUARTER	2ND QUARTER	3RD QUARTER	4TH QUARTER
MW-1	**G,P,S**	-	**G,P,S**	-
Chemical analysis	*TPHG, VOCS, FUEL OXY*	-	*TPHG, VOCS, FUEL OXY*	-
MW-2	**G,P,S**	-	**G,P,S**	-
Chemical analysis	*TPHG, VOCS, FUEL OXY*	-	*TPHG, VOCS, FUEL OXY*	-
MW-3	**G,P,S**	-	**G,P,S**	-
Chemical analysis	*TPHG, VOCS, FUEL OXY*	-	*TPHG, VOCS, FUEL OXY*	-
MW-4	**G,P,S**	-	**G,P,S**	-
Chemical analysis	*TPHG, VOCS, FUEL OXY*	-	*TPHG, VOCS, FUEL OXY*	-
MW-5	**G,P,S**	-	**G,P,S**	-
Chemical analysis	*TPHG, VOCS, FUEL OXY*	-	*TPHG, VOCS, FUEL OXY*	-
MW-6	**G,P,S**	-	**G,P,S**	-
Chemical analysis	*TPHG, VOCS, FUEL OXY*	-	*TPHG, VOCS, FUEL OXY*	-
MW-7	**G,P,S**	-	**G,P,S**	-
Chemical analysis	*TPHG, VOCS, FUEL OXY*	-	*TPHG, VOCS, FUEL OXY*	-
MW-8	**G,P,S**	-	**G,P,S**	-
Chemical analysis	*TPHG, VOCS, FUEL OXY*	-	*TPHG, VOCS, FUEL OXY*	-
MW-9	**G,P,S**	-	**G,P,S**	-
Chemical analysis	*TPHG, VOCS, FUEL OXY*	-	*TPHG, VOCS, FUEL OXY*	-
MW-10	**G,P,S**	-	**G,P,S**	-
Chemical analysis	*TPHG, VOCS, FUEL OXY*	-	*TPHG, VOCS, FUEL OXY*	-

NOTES:

G - GAUGE WELL
P - PURGE WELL
S - SAMPLE WELL
- NO SAMPLING
TPHg - Total Petroleum Hydrocarbon, Gasoline, EPA Method 8015M
VOCs - Volatile Organic Compounds, EPA Method 8260B Full Scan
BTEX - Benzene, Toluene, Ethylbenzene and Total Xylenes, EPA Method 8260B
Fuel Oxy - MTBE, ETBE, DIPE, TAME and TBA, EPA Method 8260B
MTBE - Methyl tert-Butyl ether
ETBE - Ethyl tert-Butyl ether
DIPE - Di-isopropyl ether
TAME - tert-Amyl Methyl ether
TBA - tert-Butyl Alcohol
Methanol, EPA 8260B

APPENDIX A

ATLAS ENVIRONMENTAL ENGINEERING, INC.
3185 AIRWAY AVENUE
COSTA MESA, CALIFORNIA 92626
(714) 890 - 7129

PROJECT STATUS REPORT

GOLDENWEST COLLEGE

15744 GOLDENWEST STREET

HUNTINGTON BEACH, CALIFORNIA

AE JOB NO./INV. GWC -Q1/11

DATE: **JANUARY** 6, 2011

OBSERVATION WELLS

NO.	DTW	DTP	PT	GALLONS	DTB	DIA.	ELEVATION			ODORS			F/P	
			FEET	REMOVED	FEET	INCH	CDTW	SWE	E-WAT	YES	NO	SLIGHT	YES	NO
MW-1	5.98			14.00	12.69	3.00	5.98	24.75	18.77	-	X	-	-	X
MW-2	5.87			45.00	23.44	4.00	5.87	24.97	19.10	-	X	-	-	X
MW-3	5.14			77.00	15.16	10.00	5.14	24.25	19.11	-	X	-	-	X
MW-4	6.85			36.00	20.49	4.00	6.85	24.01	17.16	-	X	-	-	X
MW-5	6.40			31.00	18.24	4.00	6.40	24.21	17.81	-	X	-	-	X
MW-6	5.21			40.00	20.49	4.00	5.21	26.47	21.26	-	X	-	-	X
MW-7	5.92			37.00	20.45	4.00	5.92	24.46	18.54	-	X	-	-	X
MW-8	6.40			37.00	20.45	4.00	6.40	24.60	18.20	-	X	-	-	X
MW-9	5.31			40.00	20.50	4.00	5.31	23.83	18.52	-	X	-	-	X
MW-10	7.75			8.00	18.81	2.00	7.75	25.53	17.78	-	X	-	-	X

EXPLANATION

DTW - DEPTH TO WATER FROM SURFACE
MEASUREMENTS IN FEET
CDTW - CORRECTED DEPTH TO WATER FOR PRESENCE OF FREE PRODUCT (USING SPECIFIC GRAVITY OF 0.755)
SWE - SURVEYED WELL HEAD ELEVATION
DTP - DEPTH TO PRODUCT FROM SURFACE
DTB - DEPTH TO BOTTOM
E-WAT - ELEVATION OF WATER
PT - PRODUCT THICKNESS
DIA - WELL DIAMETER
F/P - FREE PRODUCT

REMARKS

FREE PRODUCT REMOVED: APPROX. _____ GALLONS TOTAL TO DATE: _____ GALLONS
GROUNDWATER(*) REMOVED: APPROX. 365.00 GALLONS TOTAL TO DATE: 634.00 GALLONS

(*) PRODUCT/GROUNDWATER MIXTURE/DECON. WATER

55 GALLON DRUM: PROD. _____ GALLONS WATER _____ GALLONS DIA _____ DTW TD _____ DTP

DATA RECORDED BY: E.G./K.W. INPUT BY: E.G.

FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

SITE/JOB GOLDENWEST COLLEGE DATE JAN. 6 2011

ADDRESS 9063 RECREATION CIRCLE, FOUNTAIN VALLEY, CA

PERSONNEL EG/KW WEATHER SUNNY

WELL NO. MW-1 EQUIPMENT

Before Purging

Total Well Depth	12.67	Ft.	Well Diameter	3"	Inch.
Depth to Water	5.98	Ft.	Est. Purge Vol.	14	Gal.

Sampling Data

Initial Turbidity 15 Final Turbidity 6.5

DO 0.00 ORP -91.0

Time (MT)	8:00	8:03	8:06	8:09	8:12	
EC	3471	3488	2069	2071	2072	
pH	8.07	8.23	8.24	8.26	8.26	
Temp. (°F)	57.09	58.91	56.15	56.18	56.18	
(°C)						
Gal.	3	6	9	12	14	
Time (MT)						
EC						
pH						
Temp. (°F)						
(°C)						
Gal.						

After Purging/Before Sample Collection

Depth to Water	6.96	Ft.	Total Well Depth	12.69	Ft.

FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

SITE/JOB	GOLDENWEST COLLEGE	DATE	JAN. 6 2011
ADDRESS	9063 RECREATION CIRCLE, FOUNTAIN VALLEY, CA		
PERSONNEL	EG/KW	WEATHER	SUNNY
WELL NO.	MW-2	EQUIPMENT	

Before Purging

Total Well Depth	23.44	Ft.	Well Diameter	4"	Inch.
Depth to Water	5.87	Ft.	Est. Purge Vol.	45	Gal.

Sampling Data

Initial Turbidity	17.5			Final Turbidity	6.5	
DO	0.0			ORP	-8.7	
Time (MT)	10:30	10:33	10:36	10:39	10:42	
EC	2784	3034	2471	2311	2312	
pH	9.13	9.25	8.99	8.98	8.98	
Temp. (°F)	66.21	66.23	65.79	65.06	65.01	
(°C)						
Gal.	9	18	27	36	45	
Time (MT)						
EC						
pH						
Temp. (°F)						
(°C)						
Gal.						

After Purging/Before Sample Collection

Depth to Water	6.80	Ft.	Total Well Depth	23.44	Ft.

FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

SITE/JOB *GOLDENWEST COLLEGE* DATE *JAN. 6 2011*

ADDRESS *9063 RECREATION CIRCLE, FOUNTAIN VALLEY, CA*

PERSONNEL *EG/KW* WEATHER

WELL NO. *MW-3* EQUIPMENT

Before Purging

Total Well Depth	15.16	Ft.	Well Diameter	16"	Inch.
Depth to Water	5.14	Ft.	Est. Purge Vol.	~~77~~	Gal.

Sampling Data

Initial Turbidity 17 Final Turbidity 5.0

DO 0.00 ORP -87.5

Time (MT)	9:15	9:18	9:21	9:24	9:27	
EC	2959	3087	3089	3207	3218	
pH	8.75	8.82	8.88	8.96	8.95	
Temp. (°F)	61.20	61.42	61.80	62.52	62.59	
(°C)						
Gal.	15	20	35	~~50~~	~~77~~	
Time (MT)						
EC						
pH						
Temp. (°F)						
(°C)						
Gal.						

After Purging/Before Sample Collection

Depth to Water	6.10	Ft.	Total Well Depth	15.16	Ft.

FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

SITE/JOB: GOLDENWEST COLLEGE DATE: JAN. 6 2011

ADDRESS: 9063 RECREATION CIRCLE, FOUNTAIN VALLEY, CA

PERSONNEL: EG/KW WEATHER: SUNNY

WELL NO.: MW-4 EQUIPMENT:

Before Purging

Total Well Depth	20.49	Ft.	Well Diameter	4"	Inch.
Depth to Water	6.85	Ft.	Est. Purge Vol.	36	Gal.

Sampling Data

Initial Turbidity: 20 Final Turbidity: 6.5

DO: 0.00 ORP: 10.6

Time (MT)	8:36	8:29	8:26	8:39	8:42	
EC	1327	1322	1320	1326	1300	
pH	7.97	8.00	8.02	7.89	7.90	
Temp. (°F)	67.19	67.45	67.59	65.74	65.76	
(°C)						
Gal.	7	14	21	28	36	
Time (MT)						
EC						
pH						
Temp. (°F)						
(°C)						
Gal.						

After Purging/Before Sample Collection

Depth to Water	7.85	Ft.	Total Well Depth	20.49	Ft.

FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

SITE/JOB *GOLDENWEST COLLEGE* DATE *JAN. 6 2011*

ADDRESS *9063 RECREATION CIRCLE, FOUNTAIN VALLEY, CA*

PERSONNEL *EG/KW* WEATHER SUNNY

WELL NO. MW-5 EQUIPMENT

Before Purging

Total Well Depth	18.29	Ft.	Well Diameter	4	Inch.
Depth to Water	6.40	Ft.	Est. Purge Vol.	31	Gal.

Sampling Data

Initial Turbidity 20 Final Turbidity 7.5

DO 6 ORP 14.6

Time (MT)	8:45	8:48	8:51	8:54	8:57	
EC	1240	1237	1236	1199	1193	
pH	8.00	8.12	8.21	8.25	8.25	
Temp. (°F)	67.18	67.90	67.55	72.93	72.00	
(°C)						
Gal.	6	12	18	24	31	
Time (MT)						
EC						
pH						
Temp. (°F)						
(°C)						
Gal.						

After Purging/Before Sample Collection

Depth to Water	7.51	Ft.	Total Well Depth	18.24	Ft.

FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

SITE/JOB: GOLDENWEST COLLEGE — DATE: JAN. 6 2011

ADDRESS: 9063 RECREATION CIRCLE, FOUNTAIN VALLEY, CA

PERSONNEL: EG/KW — WEATHER: SUNNY

WELL NO.: MW-6 — EQUIPMENT:

Before Purging

Total Well Depth	20.49	Ft.	Well Diameter	4"	Inch.
Depth to Water	5.21	Ft.	Est. Purge Vol.	40	Gal.

Sampling Data

Initial Turbidity: 17 — Final Turbidity: 7.0

DO: 0.00 — ORP: -131.5

Time (MT)	10:02	10:03	10:06	10:09	10:12	
EC	7492	3781	3993	3700	3704	
pH	8.98	9.03	9.11	8.70	8.71	
Temp. (°F)	60.91	60.71	60.97	71.82	72.10	
(°C)						
Gal.	8	16	24	32	40	
Time (MT)						
EC						
pH						
Temp. (°F)						
(°C)						
Gal.						

After Purging/Before Sample Collection

Depth to Water	6.18	Ft.	Total Well Depth	20.49	Ft.

FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

SITE/JOB *GOLDENWEST COLLEGE* DATE *JAN. 6 2011*

ADDRESS *9063 RECREATION CIRCLE, FOUNTAIN VALLEY, CA*

PERSONNEL *EG/KW* WEATHER *SUNNY*

WELL NO. *MW-7* EQUIPMENT

Before Purging

Total Well Depth	20.42	Ft.	Well Diameter	4"	Inch.
Depth to Water	5.92	Ft.	Est. Purge Vol.	37	Gal.

Sampling Data

Initial Turbidity 18 Final Turbidity 6.0

DO 0.00 ORP -13.1

Time (MT)	8:15	8:18	8:21	8:24	8:27	
EC	4581	4569	4586	2923	3042	
pH	7.75	7.85	7.93	7.94	7.95	
Temp. (°F)	52.46	52.74	53.15	63.21	63.66	
(°C)						
Gal.	7	14	21	28	37	
Time (MT)						
EC						
pH						
Temp. (°F)						
(°C)						
Gal.						

After Purging/Before Sample Collection

Depth to Water 6.87 Ft. Total Well Depth 20.45 Ft.

FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

SITE/JOB	*GOLDENWEST COLLEGE*	DATE	*JAN. 6 2011*
ADDRESS	*9063 RECREATION CIRCLE, FOUNTAIN VALLEY, CA*		
PERSONNEL	*EG/KW*	WEATHER	SUNNY
WELL NO.	MW-8	EQUIPMENT	

Before Purging

Total Well Depth	20.45	Ft.	Well Diameter	4"	Inch.
Depth to Water	6.40	Ft.	Est. Purge Vol.	37	Gal.

Sampling Data

Initial Turbidity ____ Final Turbidity ____

DO 0.00 ORP -174.3

Time (MT)	9:45	9:48	9:51	9:54	9:57	
EC	2417	2435	2404	2395	2389	
pH	9.80	9.71	9.49	9.48	9.47	
Temp. (°F)	61.21	61.53	62.91	63.10	63.13	
(°C)						
Gal.	7	14	21	28	37	
Time (MT)						
EC						
pH						
Temp. (°F)						
(°C)						
Gal.						

After Purging/Before Sample Collection

Depth to Water	7.37	Ft.	Total Well Depth	20.45	Ft.

FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

SITE/JOB: *GOLDENWEST COLLEGE* DATE: *JAN. 6 2011*

ADDRESS: *9063 RECREATION CIRCLE, FOUNTAIN VALLEY, CA*

PERSONNEL: *EG/KW* WEATHER: SUNNY

WELL NO.: MW-9 EQUIPMENT: D.A

Before Purging

Total Well Depth	20.50	Ft.	Well Diameter	4"	Inch.
Depth to Water	5.81	Ft.	Est. Purge Vol.	40	Gal.

Sampling Data

Initial Turbidity: 22 Final Turbidity: 6.5

DO: 0 ORP: -59

Time (MT)	11:00	11:03	11:06	11:09	11:12	
EC	2427	2231	2219	1992	1971	
pH	9.05	9.13	9.15	8.96	6.95	
Temp. (°F)	60.78	61.07	61.30	66.84	66.83	
(°C)						
Gal.	8	16	24	32	40	
Time (MT)						
EC						
pH						
Temp. (°F)						
(°C)						
Gal.						

After Purging/Before Sample Collection

Depth to Water	6.26	Ft.	Total Well Depth	20.50	Ft.

FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

SITE/JOB: GOLDENWEST COLLEGE DATE: JAN. 6 2011

ADDRESS: 9063 RECREATION CIRCLE, FOUNTAIN VALLEY, CA

PERSONNEL: EG/KW WEATHER: SUNNY

WELL NO.: MW-10 EQUIPMENT:

Before Purging

Total Well Depth	18.81	Ft.	Well Diameter	2	Inch.
Depth to Water	7.75	Ft.	Est. Purge Vol.	8	Gal.

Sampling Data

Initial Turbidity: 21 Final Turbidity: 7.0

DO: 0.00 ORP: -43.1

Time (MT)	9:30	9:33	9:36	9:29	9:42	
EC	2847	3007	2116	2104	2097	
pH	8.85	8.94	8.99	9.00	8.98	
Temp. (°F)	64.36	64.59	64.90	64.79	64.78	
(°C)						
Gal.	2	4	6	7	8	
Time (MT)						
EC						
pH						
Temp. (°F)						
(°C)						
Gal.						

After Purging/Before Sample Collection

Depth to Water	8.70	Ft.	Total Well Depth	18.81	Ft.

GROUNDWATER MONITORING PROCEDURES

Required Notifications/Review

1. Prior conducting any field work, the client, regulatory agency, and property owner/manager are notified in writing via facsimile or email. If possible, a minimum of 48 hours notice will be provided prior to conducting the field work.

2. If available, construction details of all wells will be reviewed prior to field work being conducted. This will allow determination in the field of special conditions such as; groundwater levels above or below screened interval.

Water Level/LNAPL Measurements

1. During the groundwater monitoring phase of the fieldwork, all wells are monitored for light non-aqueous phase liquid (LNAPL) using a clear plastic bailer or interface probe. All equipment is cleaned prior to and between locations via a steam cleaner or "three bucket wash" method.

2. Water level is measurements are taken in order from the historically "cleanest" wells to historically "most contaminated" wells.

3. Water levels are measured using an electronic measuring device (±0.01 foot) and are referenced to the surveyed datum (well cover or top of casing). If no survey mark is noted on the well cover, the well is marked with a permanent notch or marker on the north side of the cover for future consistent readings.

4. Recorded measurements include the depth to groundwater, depth to LNAPL and depth to bottom of well.

5. If possible, all wells are gauged on the same day to obtain accurate measurements of the potentiometric surface.

6. If LNAPL is encountered, the potentiometric surface elevation is calculated as:

$$DTWc = DTWm - (Tsph \times SGsph)$$

Where:	DTWc	= Corrected Depth to Water
	DTWm	= Measured Depth to Water
	Tsph	= Thickness of LNAPL
	SGsph	= Specific Gravity of LNAPL

If SGsph is not known, the following will be assumed:

Gasoline	0.75 g/cm^3
Diesel	0.81 g/cm^3
Jet Fuel (JP-4)	0.79 g/cm^3
#2 Fuel Oil	0.91 g/cm^3
#6 Fuel Oil	0.96 g/cm^3

7. All monitoring data is recorded on field data sheet, reviewed, transferred to a data base and incorporated in the final reporting.

GROUNDWATER SAMPLING PROCEDURES

Wells Exhibiting LNAPL

If a well exhibits measurable LNAPL thickness, sampling will not be conducted. Instead the LNAPL will be bailed from the well to the extent possible within the purging timeframe. Should a groundwater sample be required by the regulatory agency for the project, a sample is collected from the groundwater retained in a bailer lowered below the LNAPL. Wells containing LNAPL will not be purged.

Sample Collection - Purging Method

1. Wells are selected in order of increasing contaminants historically detected.

2. Integrity of the well cover, well cap and top of casing are established and noted for future reference.

3. Non-dedicated equipment is decontaminated using a steam cleaner or "three bucket" wash.

4. Depth to water, depth to LNAPL (if present) and total depth of well are determined using an electronic water level indicator or interface gauging probe in accordance with the monitoring procedures outlined.

5. Generally, well casing volume is calculated for estimating the total minimum purge volume required. The borehole volume will be used, as follows:

$$Bv = 7.48*[\{3.14(Cd/2)^2 + 3.14P[(Bd/2)^2 - (Cd/2)2]\}*(Dw-DTW)]$$

Where:
- Bv = Boring volume in gallons
- 7.48 = gallons per cubic foot
- Cd = casing diameter in feet
- P = porosity of the sand/gravel pack
- Bd = boring diameter in feet
- Dw = depth of the well in feet
- DTW = depth to water

6. Groundwater is removed from the well by bailing or pumping (using a diaphragm, down hole pump or vacuum truck) until it is determined that the well is beginning to dry or until at least four (4) well volumes have been purged and water quality parameters (pH, conductivity, turbidity and temperature) stabilized (within 10 percent of previous reading). When purging via bailing or use of pumps, the purge water is discharged into

DOT-approved 55-gallon drums and is stored onsite, temporarily, for subsequent proper disposal by the generator. Disposal methods used by the generator are either off-site disposal by subcontracting a certified waste transporter to remove the stored purge water and properly dispose of the purge water at a recycling facility or use of an on-site groundwater treatment system for the treatment and discharge into either the local storm drain in accordance with an NPDES permit, re-infiltrated in accordance with a WDR permit. If groundwater is removed using a vacuum truck, the vacuum truck will store the purged water and transport it off-site to a waste disposal facility for recycling. Waste manifest will be available once received from the recycling facility.

7. After the well has recovered at least 80 percent or within two hours of purging, a sample is collected just below the water surface using a bailer (teflon, stainless steel or disposable bottom emptying) and placed into laboratory supplied containers. The containers are completely filled and the cap immediately placed over the top and securely tightened. Vials are inverted and tapped to determine if air bubbles are present. Samples are labeled, and placed on ice in an ice chest until delivery to the laboratory.

8. The following equation is used to determine 80 percent recovery:

$$Rdtw = Dw - (WCl \times 0.8)$$

Where:

Rdtw	= Recharge DTW (maximum for 80 % recovery)
Dw	= Depth of well, in feet
DTW	= Depth to water
WCl	= Water column length (TDw – DTW)

Sample Collection – Micro-Purge Method

1. Wells are selected in order of increasing contaminants historically detected.

2. Integrity of the well cover, well cap and top of casing are established and noted for future reference.

3. Non-dedicated equipment is decontaminated using a steam cleaner or "three bucket" wash.

4. Depth to water, depth to LNAPL (if present) and total depth of well are determined using an electronic water level indicator or interface gauging probe in accordance with the monitoring procedures outlined.

APPENDIX B

Alpha Scientific Corporation
Environmental Laboratories

01-18-2011

Mr. Karl Kerner
Atlas Environmental Engineering, Inc.
3185 Airway Avenue, Suite D-1
Costa Mesa, CA 92626

Project: Goldenwest College
Project Site: 15744 Goldenwest Street, Huntington Beach, CA
Sample Date: 01-06-2011
Lab Job No.: R101036

Dear Mr. Kerner:

Enclosed please find the analytical report for the sample(s) received by Alpha Scientific Corporation on 01-10-2011 and analyzed by the following EPA methods:

TPH-Gasoline
EPA 8260B (VOCs & Oxygenates by GC/MS)

All analyses have met the QA/QC criteria of this laboratory.

The sample(s) arrived in good conditions (i.e., chilled, intact) and with a chain of custody record attached.

Alpha Scientific Corporation is certified by CA DHS (Certificate Number 2633). Thank you for giving us the opportunity to serve you. Please feel free to call me at (562) 809-8880 if our laboratory can be of further service to you.

Sincerely,

Roger Wang, Ph.D.
Laboratory Director

Enclosures

This cover letter is an integral part of this analytical report.

Alpha Scientific Corporation
Environmental Laboratories

01-18-2011

Client:	Atlas Environmental Engineering Inc.	Lab Job No.:	R101036
Project:	Goldenwest College		
Project Site:	15744 Goldenwest Street, Huntington Beach, CA	Date Sampled:	01-06-2011
Matrix:	Water	Date Received:	01-10-2011
Batch No.	EMA11-GW1	Date Analyzed:	01-11-2011

TPH-Gasoline by LUFT GC/MS
Reporting Units: µg/L (ppb)

Sample ID	Lab ID	Gasoline Range TPH*	MDL	PQL
Method Blank		ND	50	100
MW-1	R101036-1	ND	50	100
MW-2	R101036-2	ND	50	100
MW-3	R101036-3	53J	50	100
MW-4	R101036-4	ND	50	100
MW-5	R101036-5	ND	50	100
MW-6	R101036-6	ND	50	100
MW-7	R101036-7	ND	50	100
MW-8	R101036-8	53J	50	100
MW-9	R101036-9	ND	50	100
MW-10	R101036-10	ND	50	100

* Gasoline Range TPH are petroleum hydrocarbons in the range C4-C12;
MDL: Method Detection Limit;
PQL: Practical Quantitation Limit;
ND: Not Detected (below MDL);
J: Trace value. Result is lower than PQL but higher than MDL.

Client: Atlas Environmental Engineering Inc. Lab Job No.: R101036 Date Reported: 01-18-2011
Project:Goldenwest College Matrix: Water Date Sampled: 01-06-2011

EPA 8260B (VOCs by GC/MS, Page 1 of 2) Reporting Unit: µg/L (ppb)

DATE ANALYZED			01-11	01-11-11	01-11-11	01-11-11	01-11-11	01-11-11
DILUTION FACTOR (DF)			1	1	1	1	1	1
LAB SAMPLE I.D.				R101036-1	R101036-2	R101036-3	R101036-4	R101036-5
CLIENT SAMPLE I.D.				MW-1	MW-2	MW-3	MW-4	MW-5
COMPOUND	MDL	PQL	MB					
Dichlorodifluoromethane	1	5	ND	ND	ND	ND	ND	ND
Chloromethane	1	5	ND	ND	ND	ND	ND	ND
Vinyl Chloride	0.5	1	ND	ND	ND	ND	ND	ND
Bromomethane	1	5	ND	ND	ND	ND	ND	ND
Chloroethane	1	5	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	1	5	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	1	5	ND	ND	ND	ND	ND	ND
Iodomethane	1	5	ND	ND	ND	ND	ND	ND
Methylene Chloride	2	10	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	1	5	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	1	5	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	1	5	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	1	5	ND	ND	2.9J	10.3	ND	ND
Bromochloromethane	1	5	ND	ND	ND	ND	ND	ND
Chloroform	1	5	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.5	5	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	1	5	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	0.5	5	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	1	5	ND	ND	ND	ND	ND	ND
Benzene	0.5	1	ND	ND	ND	4.3	ND	ND
Trichloroethene	1	2	ND	ND	1.5J	ND	ND	ND
1,2-Dichloropropane	1	5	ND	ND	ND	ND	ND	ND
Bromodichloromethane	1	5	ND	ND	ND	ND	ND	ND
Dibromomethane	1	5	ND	ND	ND	ND	ND	ND
Trans-1,3-Dichloropropene	1	5	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	1	5	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1	5	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.5	5	ND	ND	ND	ND	ND	ND
Dibromochloromethane	1	5	ND	ND	ND	ND	ND	ND
2-Chloroethylvinyl ether	1	10	ND	ND	ND	ND	ND	ND
Bromoform	1	5	ND	ND	ND	ND	ND	ND
Isopropylbenzene	1	5	ND	3.3J	ND	ND	ND	ND
Bromobenzene	1	5	ND	ND	ND	ND	ND	ND

Client: Atlas Environmental Engineering Inc. Lab Job No.: R101036 Date Reported: 01-18-2011
Project:Goldenwest College Matrix: Water Date Sampled: 01-06-2011

EPA 8260B (VOCs by GC/MS, Page 2 of 2) Reporting Unit: ppb

COMPOUND	MDL	PQL	MB	MW-1	MW-2	MW-3	MW-4	MW-5
Toluene	0.5	1	ND	1.9	ND	ND	ND	ND
Tetrachloroethene	1	2	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane(EDB)	1	5	ND	ND	ND	ND	ND	ND
Chlorobenzene	1	5	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	1	5	ND	ND	ND	ND	ND	ND
Ethylbenzene	0.5	1	ND	1.4	ND	7.5	ND	ND
Total Xylenes	1	2	ND	4.5	ND	2.7	ND	ND
Styrene	1	5	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	1	5	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	1	5	ND	ND	ND	ND	ND	ND
n-Propylbenzene	1	5	ND	7.3	ND	1.2J	ND	ND
2-Chlorotoluene	1	5	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	1	5	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	1	5	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	1	5	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	1	5	ND	1.5J	ND	ND	ND	ND
Sec-Butylbenzene	1	5	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	1	5	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	1	5	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	1	5	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	1	5	ND	ND	ND	ND	ND	ND
n-Butylbenzene	1	5	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	1	5	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-Chloropropane	1	5	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	1	5	ND	ND	ND	ND	ND	ND
Naphthalene	1	5	ND	ND	ND	1.5J	ND	ND
1,2,3-Trichlorobenzene	1	5	ND	ND	ND	ND	ND	ND
Acetone	25	50	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	25	50	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	25	50	ND	ND	ND	ND	ND	ND
2-Hexanone	25	50	ND	ND	ND	ND	ND	ND
Ethanol	250	500	ND	ND	ND	ND	ND	ND
MTBE	1	2	ND	ND	ND	ND	ND	ND
ETBE	1	2	ND	ND	ND	ND	ND	ND
DIPE	1	2	ND	ND	ND	ND	ND	ND
TAME	1	2	ND	ND	ND	ND	ND	ND
T-Butyl Alcohol	10	20	ND	ND	ND	ND	ND	ND

MB=Method Blank; MDL=Method Detection Limit; PQL=Practical Quantitation Limit; ND=Not Detected (below DF × MDL). * Result from a higher dilution analysis. J=Result is between DF × MDL & DF × PQL.

Client: Atlas Environmental Engineering Inc. Lab Job No.: R101036 Date Reported: 01-18-2011
Project:Goldenwest College Matrix: Water Date Sampled: 01-06-2011

EPA 8260B (VOCs by GC/MS, Page 1 of 2) Reporting Unit: µg/L (ppb)

DATE ANALYZED			01-11	01-11-11	01-11-11	01-11-11	01-11-11	01-11-11
DILUTION FACTOR (DF)			1	1	1	1	1	1
LAB SAMPLE I.D.				R101036-6	R101036-7	R101036-8	R101036-9	R101036-10
CLIENT SAMPLE I.D.				MW-6	MW-7	MW-8	MW-9	MW-10
COMPOUND	MDL	PQL	MB					
Dichlorodifluoromethane	1	5	ND	ND	ND	ND	ND	ND
Chloromethane	1	5	ND	ND	ND	ND	ND	ND
Vinyl Chloride	0.5	1	ND	ND	ND	ND	ND	ND
Bromomethane	1	5	ND	ND	ND	ND	ND	ND
Chloroethane	1	5	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	1	5	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	1	5	ND	ND	ND	ND	ND	ND
Iodomethane	1	5	ND	ND	ND	ND	ND	ND
Methylene Chloride	2	10	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	1	5	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	1	5	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	1	5	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	1	5	ND	16.6	ND	ND	ND	ND
Bromochloromethane	1	5	ND	ND	ND	ND	ND	ND
Chloroform	1	5	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.5	5	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	1	5	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	0.5	5	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	1	5	ND	ND	ND	ND	ND	ND
Benzene	0.5	1	ND	ND	ND	ND	ND	ND
Trichloroethene	1	2	ND	6.5	ND	ND	ND	ND
1,2-Dichloropropane	1	5	ND	ND	ND	ND	ND	ND
Bromodichloromethane	1	5	ND	ND	ND	ND	ND	ND
Dibromomethane	1	5	ND	ND	ND	ND	ND	ND
Trans-1,3-Dichloropropene	1	5	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	1	5	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1	5	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.5	5	ND	ND	ND	ND	ND	ND
Dibromochloromethane	1	5	ND	ND	ND	ND	ND	ND
2-Chloroethylvinyl ether	1	10	ND	ND	ND	ND	ND	ND
Bromoform	1	5	ND	ND	ND	ND	ND	ND
Isopropylbenzene	1	5	ND	ND	ND	6.5	ND	ND
Bromobenzene	1	5	ND	ND	ND	ND	ND	ND

Client: Atlas Environmental Engineering Inc. Lab Job No.: R101036 Date Reported: 01-18-2011
Project:Goldenwest College Matrix: Water Date Sampled: 01-06-2011

EPA 8260B (VOCs by GC/MS, Page 2 of 2) Reporting Unit: ppb

COMPOUND	MDL	PQL	MB	MW-6	MW-7	MW-8	MW-9	MW-10
Toluene	0.5	1	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1	2	ND	1.8J	ND	ND	ND	ND
1,2-Dibromoethane(EDB)	1	5	ND	ND	ND	ND	ND	ND
Chlorobenzene	1	5	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	1	5	ND	ND	ND	ND	ND	ND
Ethylbenzene	0.5	1	ND	ND	ND	2.6	ND	ND
Total Xylenes	1	2	ND	ND	ND	ND	ND	ND
Styrene	1	5	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	1	5	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	1	5	ND	ND	ND	ND	ND	ND
n-Propylbenzene	1	5	ND	ND	ND	12.4	ND	ND
2-Chlorotoluene	1	5	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	1	5	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	1	5	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	1	5	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	1	5	ND	ND	ND	ND	ND	ND
Sec-Butylbenzene	1	5	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	1	5	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	1	5	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	1	5	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	1	5	ND	ND	ND	ND	ND	ND
n-Butylbenzene	1	5	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	1	5	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-Chloropropane	1	5	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	1	5	ND	ND	ND	ND	ND	ND
Naphthalene	1	5	ND	ND	ND	1.2J	ND	ND
1,2,3-Trichlorobenzene	1	5	ND	ND	ND	ND	ND	ND
Acetone	25	50	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	25	50	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	25	50	ND	ND	ND	ND	ND	ND
2-Hexanone	25	50	ND	ND	ND	ND	ND	ND
Ethanol	250	500	ND	ND	ND	ND	ND	ND
MTBE	1	2	ND	ND	ND	2.5	ND	ND
ETBE	1	2	ND	ND	ND	ND	ND	ND
DIPE	1	2	ND	ND	ND	ND	ND	ND
TAME	1	2	ND	ND	ND	ND	ND	ND
T-Butyl Alcohol	10	20	ND	ND	ND	ND	ND	ND

MB=Method Blank; MDL=Method Detection Limit; PQL=Practical Quantitation Limit; ND=Not Detected (below DF × MDL). * Result from a higher dilution analysis. J=Result is between DF × MDL & DF × PQL.

01-18-2011

TPH-Gasoline
Batch QA/QC Report

Client:	Atlas Environmental Engineering, Inc.	Lab Job No.:	R101036
Project:	Goldenwest College		
Matrix:	Water	Lab Sample ID:	R101036-10
Batch No:	EMA11-GW1	Date Analyzed:	01-12-2011

I. MS/MSD Report
Unit: ppb

Analyte	Sample Conc.	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
TPH-g	ND	1,000	944	959	94.4	95.9	1.6	30	70-130

II. LCS Result
Unit: ppb

Analyte	LCS Value	True Value	Rec.%	Accept. Limit
TPH-g	895	1,000	89.5	80-120

ND: Not Detected (at the specified limit).

01-18-2011

EPA 8260B
Batch QA/QC Report

Client:	Atlas Environmental Engineering, Inc.	Lab Job No.:	R101036
Project:	Goldenwest College		
Matrix:	Water	Lab Sample ID:	R101036-10
Batch No:	0111-VOEW1	Date Analyzed:	01-12-2011

I. MS/MSD Report
Unit: ppb

Analyte	Sample Conc.	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
1,1-Dichloroethene	ND	20	16.0	17.6	80.0	88.0	9.5	30	70-130
Benzene	ND	20	21.1	22.6	105.5	113.0	6.9	30	70-130
Trichloro-ethene	ND	20	18.6	20.0	93.0	100.0	7.3	30	70-130
Toluene	ND	20	21.4	23.9	107.0	119.5	11.0	30	70-130
Chlorobenzene	ND	20	21.6	21.4	108.0	107.0	0.9	30	70-130

II. LCS Result
Unit: ppb

Analyte	LCS Value	True Value	Rec.%	Accept. Limit
1,1-Dichloroethene	19.6	20.0	98.0	80-120
Benzene	23.1	20.0	115.5	80-120
Trichloro-ethene	20.0	20.0	100.0	80-120
Toluene	23.3	20.0	116.5	80-120
Chlorobenzene	21.0	20.0	105.0	80-120

ND: Not Detected (at the specified limit)

01-18-2011

EPA 8260B
Batch QA/QC Report

Client:	Atlas Environmental Engineering, Inc.	Lab Job No.:	R101036
Project:	Goldenwest College		
Matrix:	Water	Lab Sample ID:	R101036-10
Batch No:	0111-VOEW1	Date Analyzed:	01-12-2011

I. MS/MSD Report
Unit: ppb

Analyte	Sample Conc.	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
1,1-Dichloroethene	ND	20	16.0	17.6	80.0	88.0	9.5	30	70-130
Benzene	ND	20	21.1	22.6	105.5	113.0	6.9	30	70-130
Trichloro-ethene	ND	20	18.6	20.0	93.0	100.0	7.3	30	70-130
Toluene	ND	20	21.4	23.9	107.0	119.5	11.0	30	70-130
Chlorobenzene	ND	20	21.6	21.4	108.0	107.0	0.9	30	70-130

II. LCS Result
Unit: ppb

Analyte	LCS Value	True Value	Rec.%	Accept. Limit
1,1-Dichloroethene	19.6	20.0	98.0	80-120
Benzene	23.1	20.0	115.5	80-120
Trichloro-ethene	20.0	20.0	100.0	80-120
Toluene	23.3	20.0	116.5	80-120
Chlorobenzene	21.0	20.0	105.0	80-120

ND: Not Detected (at the specified limit)

R101036

ATLAS ENVIRONMENTAL ENGINEERING, INC. — CHAIN OF CUSTODY FORM

JOB NUMBER:	SITE/PROJECT NAME:
GWC	GOLGENWEST COLLEGE
JOB NUMBER:	SITE/PROJECT LOCATION:
WC-Q1/11EG	15744 GOLDENWEST STREET HUNTINGTON BEACH, CALIFORNIA

SAMPLER(S) SIGNATURE:

QUARTERLY WATER SAMPLING

SUBMIT RESULTS TO:

ATLAS ENVIRONMENTAL ENG.
3185 AIRWAY AVE, SUITE D-1
COSTA MESA , CALIFORNIA 92626

ATTN: KARL KERNER
PHONE NO. (714) 890-7129
FAX NO. (714) 890-7149

SAMPLE NUMBER (I.D.)	YEAR 2011 DATE MM/DD	TIME AM/PM	DEPTH BELOW GRADE (ft)	NO. OF CONTAINERS	ANALYTICAL METHOD: TPHg 8015M	BTEX + Oxygenates 8260B MTBE ETBE TAME DIPE TBA		Lab I.D	REMARKS
MW-1	01-06	8:20		2V	X		X	R101036-1	
MW-2		11:30		2V	X		X	-2	
MW-3		9:45		2V	X		X	-3	
MW-4		8:45		2V	X		X	-4	
MW-5		9:15		2V	X		X	-5	
MW-6		10:30		2V	X		X	-6	
MW-7		8:55		2V	X		X	-7	
MW-8		10:20		2V	X		X	-8	
MW-9		11:45		2V	X		X	-9	
MW-10		10:50		2V	X		X	-10	

SAMPLES INTACT: YES ✓ NO.....
SAMPLES PROPERLY COOLED: YES ✓ NO.....
TEMPERATURE STORED: 4°C
PRESERVATIVES ADDED: YES ✓ NO..... TYPE: HCl
SAMPLES ACCEPTED: YES ✓ NO.....
IF NOT, WHY: _____

SAMPLES PLACED IN LAB REFRIGERATOR
YES ✓ NO..... REP. INITIALS: RV

LABORATORY NAME: ASC

RELINQUISHED	DATE/TIME	DATE/TIME	RECEIVED
RELINQUISHED BY (SIGNATURE)/COMPANY:	DATE/TIME: 1-10-11 15:45	DATE/TIME: 1-10-11 15:45	RECEIVED BY (SIGNATURE)/COMPANY: ASC
RELINQUISHED BY (SIGNATURE)/COMPANY:	DATE/TIME	DATE/TIME	RECEIVED BY (SIGNATURE)/COMPANY:
RELINQUISHED BY (SIGNATURE)/COMPANY:	DATE/TIME	DATE/TIME	RECEIVED BY (SIGNATURE)/COMPANY:

APPENDIX C

Table 1
Golden West College Maintenance Yard
Selected Historical Groundwater Elevation and Free Hydrocarbon Product (FHP) Thickness

Well Number	Well Elevation (feet MSL)	Date Monitored	Depth to Groundwater (feet bgs)	Depth to Free Product (feet bgs)	FHP Thickness (feet)	Groundwater Elevation (feet MSL)
MW-01	24.75	05/25/88	9.16	No FHP	0.00	15.59
		03/28/91	12.81	9.77	3.04	11.94
		08/30/91	11.76	11.65	0.11	12.99
		02/05/93	10.61	10.61	Trace	14.14
		05/29/93	10.05	No FHP	0.00	14.70
		02/01/94	10.28	10.28	Trace	14.47
		05/02/94	9.92	No FHP	0.00	14.83
		12/22/94	10.06	No FHP	Sheen	14.69
MW-02	24.97	02/25/88	9.33	No FHP	0.00	15.64
		01/26/89	9.65	No FHP	0.00	15.32
		05/03/90	10.25	No FHP	0.00	14.72
		03/28/91	10.46	No FHP	0.00	14.51
		08/30/91	10.98	No FHP	0.00	13.99
		02/05/93	8.99	No FHP	0.00	15.98
		05/07/93	8.63	No FHP	0.00	16.34
		02/01/94	10.06	No FHP	0.00	14.91
		05/02/94	8.91	No FHP	0.00	16.06
		12/22/94	9.98	No FHP	0.00	14.99
MW-03	24.25	05/25/88	8.99	No FHP	0.00	15.26
		03/28/91	10.98	9.51	1.47	13.27
		08/30/91	11.80	11.31	0.49	12.45
		02/05/93	11.03	11.03	Film	13.22
		05/07/93	10.81	10.81	Trace	13.44
		02/01/94	10.09	No FHP	0.00	14.16
		05/02/94	10.46	No FHP	0.00	13.79
		12/22/94	9.90	No FHP	Sheen	14.35
MW-04	24.01	01/26/89	9.93	No FHP	0.00	14.08
		05/03/90	10.54	No FHP	0.00	13.47
		03/28/91	10.07	No FHP	0.00	13.94
		08/30/91	11.51	No FHP	0.00	12.50
		11/03/94	10.94	No FHP	0.00	13.07
		11/17/94	10.97	No FHP	0.00	13.04
		12/22/94	10.32	No FHP	0.00	13.69
MW-05	24.21	01/26/89	9.73	No FHP	0.00	14.48
		05/03/90	10.35	No FHP	0.00	13.86
		07/16/91	10.67	No FHP	0.00	13.54
		08/30/91	11.24	No FHP	0.00	12.97
		11/03/94	10.90	No FHP	0.00	13.31
		11/17/94	10.94	No FHP	0.00	13.27
		12/22/94	9.30	No FHP	0.00	14.91

Table 1
Golden West College Maintenance Yard
Selected Historical Groundwater Elevation and Free Hydrocarbon Product (FHP) Thickness

Well Number	Well Elevation (feet MSL)	Date Monitored	Depth to Groundwater (feet bgs)	Depth to Free Product (feet bgs)	FHP Thickness (feet)	Groundwater Elevation (feet MSL)
MW-06	24.57	01/26/89	9.24	No FHP	0.00	15.33
		05/03/90	9.81	No FHP	0.00	14.76
		03/28/91	10.08	No FHP	0.00	14.49
		08/30/91	10.68	No FHP	0.00	13.89
		02/05/93	7.32	No FHP	0.00	17.25
		05/07/93	8.13	No FHP	0.00	16.44
		02/01/94	9.41	No FHP	0.00	15.16
		05/02/94	8.41	No FHP	0.00	16.16
		12/22/94	9.32	No FHP	0.00	15.25
MW-07	24.46	05/03/90	10.20	No FHP	0.00	14.26
		03/28/91	10.09	No FHP	0.00	14.37
		08/30/91	11.23	No FHP	0.00	13.23
		02/05/93	10.02	No FHP	0.00	14.44
		05/07/93	9.61	No FHP	0.00	14.85
		02/01/94	10.17	No FHP	0.00	14.29
		05/02/94	9.54	No FHP	0.00	14.92
		12/22/94	9.94	No FHP	0.00	14.52
MW-08	24.6	07/16/91	13.20	9.91	3.29	11.40
		08/30/91	11.98	11.90	0.08	12.62
		02/05/93	11.91	11.91	Trace	12.69
		05/07/93	9.15	9.15	Trace	15.45
		02/01/94	10.45	No FHP	0.00	14.15
		05/02/94	10.86	No FHP	0.00	13.74
		12/22/94	10.22	No FHP	Sheen	14.38
MW-09	23.83	05/03/90	9.46	No FHP	0.00	14.37
		03/28/91	9.35	No FHP	0.00	14.48
		08/30/91	10.11	No FHP	0.00	13.72
		02/05/93	8.42	No FHP	0.00	15.41
		05/07/93	8.05	No FHP	0.00	15.78
		02/01/94	9.41	No FHP	0.00	14.42
		05/02/94	8.29	No FHP	0.00	15.54
		12/22/94	9.30	No FHP	0.00	14.53
MW-10	25.53	05/03/90	11.63	No FHP	0.00	13.90
		03/28/91	10.38	No FHP	0.00	15.15
		08/30/91	12.65	No FHP	0.00	12.88
		05/07/93	8.05	No FHP	0.00	17.48
		02/01/94	9.41	No FHP	0.00	16.12
		12/22/94	11.22	No FHP	0.00	14.31

Table 1
Golden West College Maintenance Yard
Selected Historical Groundwater Elevation and Free Hydrocarbon Product (FHP) Thickness

Well Number	Well Elevation (feet MSL)	Date Monitored	Depth to Groundwater (feet bgs)	Depth to Free Product (feet bgs)	FHP Thickness (feet)	Groundwater Elevation (feet MSL)
RW-01	23.6	03/28/91	9.04	No FHP	0.00	14.56
		08/21/91	11.15	10.94	0.21	12.45
		02/05/93	15.63	15.57	0.06	7.97
		05/07/93	16.32	16.32	Trace	7.28
		02/01/94	9.45	No FHP	0.00	14.15
		05/02/94	15.62	15.62	Trace	7.90
		12/22/94	9.34	No FHP	0.00	14.26
RW-02	24.48	03/28/91	9.97	No FHP	0.00	14.51
		08/21/91	11.82	No FHP	0.00	12.66
		02/05/93	14.06	14.00	0.06	10.42
		05/07/93	16.10	16.01	0.09	8.38
		02/01/94	10.33	10.33	Trace	14.15
		05/02/94	15.87	15.79	0.08	8.61
		12/22/94	10.20	No FHP	Sheen	14.28
OW-01	NA	08/21/91	12.02	11.73	0.29	NA
		07/08/94	10.77	No FHP	0.00	NA
		12/22/94	9.99	No FHP	0.00	NA

Notes:
Elevations are referenced to Mean Sea Level (MSL).
Data from 5/26/88 to 1/23/90 was collected by Applied Geosciences, Inc.
Data from 1/23/90 to 7/1/94 was collected by Frey Environmental.
Data after 7/1/94 was collected by Harding Lawson Associates.
Data collected after 8/1/91 may be influenced by groundwater pumping.

Table 2

Summary of Historical Groundwater Analytical Results
(Table 1, Frey 1994)

LABORATORY RESULTS
(mg/L - groundwater)

Sample Number	Date Sampled	Petroleum Hydrocarbons[1] Gasoline	Benzene[2]	Toluene	Ethyl Benzene	Xylenes
MW1	05/25/88	180.0	2.900	11.000	5.300	31.000
MW2	05/25/88	<0.01	0.001	0.002	0.001	0.003
	01/26/89	<0.05	<0.0002	<0.0002	<0.0002	<0.0002
	05/03/90	<1.0	<0.001	<0.001	<0.001	<0.001
	01/27/92	<0.05	<0.001	0.001	<0.001	<0.002
	05/01/92	0.1	<0.001	0.001	<0.001	<0.002
	07/29/92	<0.05	<0.001	<0.001	<0.001	<0.002
	11/06/92	<0.1	<0.0003	<0.0003	<0.0003	<0.0006
	02/05/93	<0.1	<0.0003	<0.0003	<0.0003	<0.0006
	05/07/93	<0.2	<0.0003	<0.0003	<0.0003	<0.0006
	08/05/93	<0.2	<0.0003	<0.0003	<0.0003	<0.0006
	02/01/94	<0.2	<0.0003	<0.0003	<0.0003	<0.0006
MW3	05/25/88	83.0	15.000	18.000	2.900	14.000
MW4	01/26/89	<0.05	<0.0002	<0.0002	<0.0002	<0.0002
	05/03/90	<1.0	0.003	<0.001	<0.001	<0.001
	07/24/91	0.87	0.208	<0.001	0.002	<0.002
	01/27/92	<0.05	0.060	0.001	0.002	<0.002
	05/01/92	<0.05	<0.001	<0.001	<0.001	<0.002
	07/29/92	<0.05	<0.001	<0.001	<0.001	<0.002
	11/06/92	<0.1	<0.0003	<0.0003	<0.0003	<0.0006
	02/05/93	<0.1	<0.0003	<0.0003	<0.0003	<0.0006
	05/07/93	<0.2	<0.0003	<0.0003	<0.0003	<0.0006
	08/05/93	<0.2	<0.0003	<0.0003	<0.0003	<0.0006
	02/01/94	<0.2	<0.0003	<0.0003	<0.0003	<0.0006
MW5	01/26/89	<0.05	<0.0002	<0.0002	<0.0002	<0.0002
	05/03/90	<1.0	<0.001	<0.001	<0.001	<0.001
	07/24/91	<0.05	<0.001	<0.001	<0.001	<0.002
	01/27/92	<0.05	<0.001	<0.001	<0.001	<0.002
	05/01/92	<0.05	<0.001	<0.001	<0.001	<0.002
	07/29/92	<0.05	<0.001	<0.001	<0.001	<0.002
	11/06/92	<0.1	<0.0003	<0.0003	<0.0003	<0.0006
	02/05/93	<0.1	<0.0003	<0.0003	<0.0003	<0.0006
	05/07/93	<0.2	<0.0003	<0.0003	<0.0003	<0.0006
	02/01/94	<0.2	<0.0003	<0.0003	<0.0003	<0.0006
MW6	01/26/89	<0.05	<0.0002	<0.0002	<0.0002	<0.0002
	05/03/90	<1.0	<0.001	<0.001	<0.001	<0.001
	07/24/91	<0.05	<0.001	0.002	<0.001	<0.002
	01/27/92	<0.05	<0.001	<0.001	<0.001	<0.002
	05/01/92	<0.05	<0.001	<0.001	<0.001	<0.002
	07/29/92	<0.05	<0.001	<0.001	<0.001	<0.002
	02/05/93	<0.1	<0.0003	<0.0003	<0.0003	<0.0006
	05/07/93	<0.2	<0.0003	<0.0003	<0.0003	<0.0006
	02/01/94	<0.2	<0.0003	0.0008	<0.0003	0.00102

Table 2 (cont'd)

Summary of Historical Groundwater Analytical Results
(Table 1, Frey 1994)

LABORATORY RESULTS
(mg/L - groundwater)

Date Sampled	Petroleum Hydrocarbons Gasoline	Benzene	Toluene	Ethyl Benzene	Xylenes
05/03/90	5.3	0.380	0.085	<0.001	0.016
07/24/91	12.9	0.414	0.016	0.028	0.139
01/27/92	4.1	1.470	0.383	0.206	0.209
05/01/92	2.1	0.300	0.006	0.037	0.125
07/29/92	0.3	0.013	0.008	<0.001	0.261
11/06/92	4.2	0.958	0.114	0.112	0.0681
02/05/93	3.3	0.610	0.129	0.162	0.149
05/07/93	6.5	0.0659	0.0039	0.0034	0.021
08/05/93	0.18	1.3000	0.0271	0.190	0.0683
11/04/93	2.46	0.00481	0.0102	<0.0003	0.0109
02/01/94	4.71	0.656	0.00807	0.00567	0.0237
05/02/94	3.84	0.479	0.0071	0.0368	0.0341
05/03/90	<1.0	<0.001	<0.001	<0.001	<0.001
01/27/92	<0.05	<0.001	0.003	0.001	0.002
05/01/92	<0.05	<0.001	<0.001	<0.001	<0.002
07/29/92	<0.05	<0.001	<0.001	<0.001	<0.002
11/06/92	<0.1	<0.0003	<0.0003	<0.0003	<0.0006
02/05/93	<0.1	<0.0003	<0.0003	<0.0003	<0.0006
05/07/93	<0.2	<0.0003	<0.0003	<0.0003	<0.0006
11/04/93	<0.2	<0.0003	<0.0003	<0.0003	<0.0006
05/02/94	<0.1	0.0039	0.0079	0.0025	0.0092
05/03/90	<1.0	<0.001	<0.001	<0.001	<0.001
07/24/91	<0.05	<0.001	0.001	<0.001	<0.002
01/27/92	<0.05	0.179	0.002	0.014	0.005
05/01/92	0.3	0.185	<0.001	0.022	<0.002
07/29/92	0.1	0.037	<0.001	<0.001	<0.002
11/06/92	0.1	0.0209	<0.0003	0.0012	<0.0006
02/05/93	<0.1	<0.0003	<0.0003	<0.0003	<0.0006
05/07/93	<0.2	<0.0003	<0.0003	<0.0003	<0.0006
08/05/93	<0.2	0.0306	0.0022	0.0033	0.0051
11/04/93	<0.2	<0.0003	<0.0003	<0.0003	<0.0006
02/01/94	<0.2	<0.0003	<0.0003	<0.0003	<0.0006
05/02/94	<0.1	<0.0003	<0.0003	<0.0003	<0.0006
02/05/93	<0.1	<0.0003	<0.0003	<0.0003	<0.0006
05/07/93	<0.2	<0.0003	<0.0003	<0.0003	<0.0006
08/05/93	<0.2	<0.0003	<0.0003	<0.0003	<0.0006
11/04/93	<0.2	<0.0003	<0.0003	<0.0003	<0.0006
02/01/94	<0.2	<0.0003	<0.0003	<0.0003	<0.0006
05/02/94	<0.1	<0.0003	<0.0003	<0.0003	<0.0006
s (Groundwater)					
ls*		0.001	0.100	0.680	1.750

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July 21, 2010

Ms. Geniece Higgins
Orange County Health Care Agency
Hazardous Materials Management Section
1241 East Dyer Road, Suite 120
Santa Ana, California 92705

RE: **Golden West College (Maintenance Yard)**
15744 Goldenwest Street
Huntington Beach, California
Limited Excavation and Site Investigation Report

Dear Ms. Higgins:

Enclosed is a copy of the *Limited Excavation and Site Investigation Report* dated July 21, 2010. This report has been prepared on behalf of Golden West College in order to provide assessment and characterization of subsurface soils. If you have any questions or require additional information, please contact me at (714) 890-7129.

Sincerely,
ATLAS ENVIRONMENTAL ENGINEERING, INC.

Karl H. Kerner, P.E.
Project Manager/Senior Engineer

cc: Mr. Jerry Marchbank, Coast Community College District, (w/1 enclosure)
Mr. Deepak Chauhan, Coast Community College District, (w/1 electronic)

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LIMITED EXCAVATION AND SITE INVESTIGATION REPORT

Golden West College (Maintenance Yard)
15744 Goldenwest Street
Huntington Beach, California

July 21, 2010

Prepared for

Mr. Jerry Marchbank
Coast Community College District
1370 Adams Avenue
Costa Mesa, California 92626

Atlas
ENVIRONMENTAL
ENGINEERING, INC.

Prepared by

ATLAS ENVIRONMENTAL ENGINEERING, INC.
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CONTENTS

INTRODUCTION **1**

Site Identification 1
Business Activities 2
Spill, Leak and Accident History 2
Number, Capacity, and Contents of Tanks 2

BACKGROUND **2**

Site Description 2
Previous Work 3

GEOLOGY AND HYDROGEOLOGY **5**

Geology 5
Hydrogeology 6

LIMITED EXCAVATION **7**

Objectives and Rationale 7
Limited Excavation 7
Confirmation Soil Sample Collection 7
Laboratory Analysis and Chain-of-Custody 7
Soil Analytical Results 8
Backfill 8

SITE INVESTIGATION **9**

Objectives and Rationale 9
Exploratory Borings and Sample Collection 9
Groundwater Sample Collection 9
Laboratory Analysis and Chain-of-Custody Documentation 10

FINDINGS **10**

Subsurface Lithology 10
Groundwater Conditions 10
Soil Analytical Results 11
Groundwater Analytical Results 12

SUMMARY **12**

DISCUSSION AND RECOMMENDATIONS **14**

CLOSING **17**

REFERENCES **18**

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CONTENTS (Continued)

FIGURES

Figure 1 – Site Location Map
Figure 2 – Previous Soil Samples, Excavation Area, Boring, and Well Locations
Figure 3 – Detailed Soil Excavation Area, Soil Samples, and Boring Locations
Figure 4 – Cross-Section Reference Lines A-A' and B-B'
Figure 5 – Cross-Section A-A', TPHg Concentrations in Soil
Figure 6 – Cross-Section B-B', TPHg Concentrations in Soil
Figure 7 – Groundwater Elevation Contour Map
Figure 8 – TPHg Concentrations in Groundwater
Figure 9 – Benzene Concentrations in Groundwater
Figure 10 – MTBE Concentrations in Groundwater
Figure 11 – TBA Concentrations in Groundwater

TABLES

Table 1 – Historical Soil Analytical Results
Table 2 – Additional Soil Analytical Results
Table 3 – Grab Groundwater Analytical Results
Table 4 – Groundwater Analytical Results
Table 5 – Additional Groundwater Analytical Results

APPENDICIES

Appendix A – OCHCA Letter of Correspondence dated March 26, 2010
Appendix B – Historical Groundwater Analytical Results – HLA and Excavation Soil Sample Location - HLA
Appendix C – Soil Waste Manifests and Soil Sampling Procedures
Appendix D – Confirmation Soil Analytical Results and Chain-of-Custody Documentation
Appendix E – Boring Logs, Permits, Soil Boring and Sampling Procedures, and Hydropunch Sampling Procedures
Appendix F – Field Project Status Report, Purge Sheets, Water Waste Manifest, and Groundwater Sampling Procedures
Appendix G – Soil, Grab Groundwater and Groundwater Analytical Results and Chain-of-Custody Documentation

Atlas ENVIRONMENTAL ENGINEERING, INC.

LIMITED EXCAVATION AND SITE INVESTIGATION REPORT
Golden West College (Maintenance Yard)
15744 Goldenwest Street
Huntington Beach, California 92647

INTRODUCTION

At the request of the Orange County Health Care Agency (OCHCA) and authorized by Coast Community College District (CCCD), Atlas Environmental Engineering, Inc. (ATLAS) has prepared this limited excavation and site investigation report to describe the limited excavation of petroleum hydrocarbon impacted soil detected during underground storage tank (UST) removal activities in January 2010, vertical and lateral extent of petroleum hydrocarbon impacted soil assessment identified during the UST removal activities at the subject site, and establish current groundwater conditions at the subject site. This work was conducted in accordance to the approved *Limited Excavation and Site Investigation Work Plan,* dated March 16, 2010 with special conditions as requested in the OCHCA letter of work plan approval dated March 16, 2010 (**Appendix A**). The following sections present site background information, the objectives of the limited excavation and investigations, field work activities, findings and recommendations.

Site Identification

Site Address:	Golden West College (Maintenance Yard) 15744 Goldenwest Street Huntington Beach, California 92647
Responsible Party:	Coast Community College District 1370 Adams Avenue Costa Mesa, California 92626
Project Contact:	Mr. Jerry Marchbank Coast Community College District 1370 Adams Avenue Costa Mesa, California 92626
OCHCA Contact:	Ms. Geniece Higgins Orange County Health Care Agency 1241 East Dyer Road, Suite 120 Santa Ana, California 92867
OCHCA Case #:	10UT004

Atlas ENVIRONMENTAL ENGINEERING, INC.

Business Activities

The subject site is currently utilized as a maintenance yard for Golden West College. Changes to the use of the facility are not anticipated in the near feature.

Spill, Leak and Accident History

In March and June 1988, subsequent to two (2) 1,000-gallon underground storage tank (UST) removal activities, petroleum hydrocarbon impacted soil and groundwater were detected at the subject site. Light non-aqueous phase liquid (LNAPL) was also measured on the water surface. OCHCA Case #88UT48 was opened and active soil and groundwater remediation were conducted at the facility. The site was granted low-risk closure in July 2000.

In January 2010, subsequent to UST removal activities of two (2) 1,000-gallon USTs and associated fuel dispenser and product line, soil samples collected during removal activities detected petroleum hydrocarbon impacted soil. Based on this information, OCHCA issued a cleanup directive dated February 1, 2010.

Number, Capacity, and Contents of Tanks

The site maintained a total of four (4) 1,000 gallon capacity USTs. The USTs contained various grades of unleaded gasoline and diesel fuel. Subsequently, two (2) 1,000-gallon USTs were removed in March and June 1988, and two (2) 1,000-gallon USTs were removed in January 2010. The USTs will be replaced with above ground tanks (ASTs).

BACKGROUND

Site Description

The subject site is located 15744 Goldenwest Street, Huntington Beach, California. The subject area is the maintenance yard at Golden West College. The maintenance yard is located near the southeast corner of McFadden Avenue and Goldenwest Street, in Huntington Beach, California (**Figure 1**). There are three (3) buildings located in this area. One (1) along the northern property line and the other two are on the southern portion of the area. The buildings are used as office space and for storage and repair of equipment. A site plan showing the major site features is presented as **Figure 2**.

Previous Work

In March 1988, one (1) 1,000-gallon UST (formerly located on the north east side of the site) containing gasoline was removed from the subject site. Subsequent to UST removal activities, confirmation soil samples collected from the UST excavation detected petroleum hydrocarbon. Groundwater was encountered at approximately 8 to 10 feet bgs in the excavation following UST removal and soil sampling activities. Therefore, the excavation was de-watered and the USTs were transported off-site for proper disposal. Based on this information, OCHCA issued a cleanup directive to address the impacted soil and groundwater at the subject site. Details of the UST removal activities were described by Applied Geoscience Inc. (AGI) in a report titled *Work Plan for Site Assessment Leaky Underground Storage Tank*, dated April 29, 1988. The former UST location is shown on **Figure 2**.

In May 1988, AGI install three (3) groundwater monitoring wells MW-1, MW-2, and MW-3 and observed the removal of one (1) 1,000-gallon UST (located on the southwest side of the site) in June 1988. Light non-aqueous phase liquid (LNAPL) was noted on the water surface in wells MW-1 and MW-3. Details of the well installation and UST removal activities were described by AGI in a reported titled *Site Assessment Report and Work Plan to Investigate the Occurrence of Gasoline in Groundwater*, dated September 2, 1988. The well and former UST locations are shown on **Figure 2**, soil analytical results are summarized in **Table 1** and historical groundwater concentrations summarized by Harding Lawson Associates (HLA) are included in **Appendix B**.

In December 1988, AGI conducted a groundwater screening survey by installing five (5) temporary groundwater monitoring points WP1 through WP5. LNAPL was noted on the water surface in monitoring point WP1. In January 1989, AGI also installed three (3) groundwater monitoring wells MW-4, MW-5, and MW-6. Details of the groundwater screening survey and well installation activities were described by AGI in a report titled *Phase II Site Assessment Investigation Report*, dated April 3, 1989. The temporary groundwater monitoring points and groundwater monitoring well locations are shown on **Figure 2**, soil analytical results are summarized in **Table 1** and historical groundwater concentrations summarized by HLA are included in **Appendix B**.

In February 1990, Frey Environmental (Frey) installed four (4) groundwater monitoring wells MW-7 through MW-10, and three (3) vapor extraction wells VES-1, VES-2, and VES-3. LNAPL was noted on the water surface in well MW-8. Details of the well installation activities were described by Frey in a report titled *Soil and Groundwater Investigation*, dated July 19, 1990. Groundwater monitoring well and vapor extraction well

locations are shown on **Figure 2**, soil analytical results are summarized in **Table 1** and historical groundwater concentrations summarized by HLA are included in **Appendix B**.

From March 1991 through July 1991, Frey installed groundwater recovery wells RW-1 and RW-2, observation well OW-1, groundwater recovery trench, and a groundwater/product treatment system. Frey also conducted an aquifer characteristics assessment. Details of the installation activities and aquifer characteristics assessment were described by Frey in a report titled *Additional Groundwater Investigation/Monitoring and Remedial System Installation*, dated September 29, 1991. Recovery and observation wells, groundwater recovery trench, and treatment system locations are shown on **Figure 2**.

In October 1992, Frey conducted vapor extraction/air permeability tests using vapor recovery wells VES-1, VES-3, MW-3, and MW-8. Details of the vapor extraction/air permeability tests are described by Frey in a report titled *Vapor Extraction System Feasibility Test*, dated November 10, 1992.

In August 1994, HLA advanced two (2) hand borings B-01 and B-02. ATLAS was unable to locate details of the hand boring activities report. However soil analytical results were summarized in subsequent historical reports. Therefore, soil analytical results are summarized in **Table 1**. Hand boring locations are shown on **Figure 2**.

In October 1994, HLA conducted and extended a 10-day soil vapor extraction (SVE) test. A brief summary of the extended vapor extraction test was described by HLA in a report titled *Evaluation of Remedial Alternatives*, dated March 2, 1995.

In August 1995, HLA conducted remedial excavation of the petroleum hydrocarbon impacted soil identified during previous assessment activities. Details of the remedial excavation were described by HLA in a report titled *Soil Remediation*, dated April 5, 1996. Excavation extent is shown on **Figure 2** and soil analytical results summarized by HLA are summarized in **Table 1**. Please note, ATLAS was unable to identify the soil sample location on Figure 2 due to the quality of the figure provided during file review. Also, soil stockpile locations were also not shown on Figure 2 or summarized in Table 1. A copy of the site plan by HLA is included in **Appendix B**.

As summarized in OCHCA's *Case Closure Summary* dated February 10, 2000, approximately 275 gallons of LNAPL were bailed from 1988 to 1991, approximately 175 gallons of hydrocarbon were removed by VES operation in 1994, approximately 2,060 cubic yards of soil were removed and transported off-site for disposal in 1995, and approximately 2,500,000 gallons of groundwater were treated on-site from 1991 to 1995. Maximum concentrations in soil post remediation remaining in place were 36,000 mg/kg

for TPHg, 110 mg/kg for Benzene, 490 mg/kg for Toluene, 590 mg/kg for Ethylbenzene, 1,100 mg/kg for Xylenes. Maximum concentrations in groundwater post remediation were 24,000 mg/L for TPHg, 0.300 mg/L for Benzene, 0.140 ug/L for Toluene, 2.4 mg/L for Ethylbenzene, 3.7 mg/L for Xylenes, and 0.370 mg/L for MTBE.

In July 2000, OCHCA issued a *Remedial Action Completion Certification* dated July 21, 2000, for the subject site.

In January 2010, M.T. Walker Company conducted UST and associated fuel dispenser and piping removal activities. Two (2) 1,000-gallon USTs containing gasoline and diesel fuel were removed. Subsequent to removal activities, confirmation soil samples were collected from the UST pit, associated fuel dispenser and product lines. Laboratory analysis of soil samples collected from the UST pit, associated fuel dispenser, and product line detected TPHg at concentrations ranging less than the laboratory detection limit to 180 mg/kg (T1-M and T1-N), TPHd ranging from less than the laboratory detection limit to 20 mg/kg (T1-N), and BTEX concentrations ranging from less than laboratory detection limits to 4.9 mg/kg (Xylenes in sample T1-M). Laboratory analysis of soil stockpile sample SP-1 detected TPHg at a concentration of 1,400 mg/kg, TPHd at a concentration of 190 mg/kg, and BTEX ranging from less than laboratory detection limits to 155 mg/kg (Xylenes). All other soil stockpile samples did not detect TPHg, TPHd, or BTEX at concentrations exceeding laboratory detection limits. MTBE, ETBE, DIPE, TAME, or TBA concentrations were not detected in any of the soil samples collected during the UST removal activities. Based on the petroleum hydrocarbon concentrations detected, OCHCA issued a notification to initiate corrective action in a letter of correspondence dated February 1, 2010. Details in regards to the UST removal activities were provided by M.T. Walker Company in an interview. Soil analytical results are summarized in **Tables 1** and **2** and soil sample locations are shown on **Figure 2**.

GEOLOGY AND HYDROGEOLOGY

Geology

The site is located within the Coastal Plain Geomorphic Province of Southern California, approximately 4 miles inland (north) from the Pacific Ocean and 6 miles west of the Santa Ana River. The geology of the area includes the Huntington Beach Mesa, which is approximately 2.5 miles wide and extends inland from the ocean nearly 4 miles, at the edge between ocean and land there is a 30 to 40-foot bluff. The mesa attains an elevation of 70 feet along the northwest bluff and the southeastern face drops 45 feet. The surface of the mesa slopes inland and it submerges under the sediments of the Downey Plain.

The geology of the area consists of Quaternary Alluvial Sediments and generally consists of sandy silt, poorly graded sand, clayey silt and silty clay.

Based on previous site investigation activities conducted by AGI and Frey, local shallow subsurface conditions beneath the site generally consist of silty sand and silt to a depth of approximately 7.5 feet bgs, silty to fine-grained sand from approximately 7.5 to 11.5 feet bgs, and clay with interbedded fine-grained sand to the maximum depth explored of 26.5 feet bgs (HLA, 1996).

Hydrogeology

The site is located in the pressure area of the Orange County Groundwater Basin. The groundwater basin in the area is a synclinal basin including a forebay and a pressure area. The forebay area lies northeast of a line that roughly coincides with the Santa Ana Freeway. Surface waters can percolate freely to the water table in the forebay. Seaward of this line, groundwater occurs under artesian pressure in aquifers which are interbedded with sediments of low permeability and percolation of surface waters to the aquifers in the pressure area, which is restricted (DWR, 1967).

Within the upper stratigraphic section in the area, two major aquifers have been identified. These are the Talbert Aquifer, which occurs within approximately 200 feet of the ground surface and the Main Aquifer, which generally occurs between elevations of -500 to -200 feet. Overlying these deep aquifer zones is a shallow water zone occurring within recent alluvium and stream deposits. Water in this zone is of limited use owing to low yields, typically less than 25 gpm and poor water quality. This zone is generally termed the "perched" or "semiperched" groundwater and has limited hydraulic continuity with deeper aquifers (Robbins, 1986).

Depth to groundwater varies from approximately 85 feet in the northeastern portion of the basin to approximately 4 feet near the coast. West of the Santa Ana River, the groundwater gradient is generally to the west and southwest (Robbins, 1986). Groundwater in the area is designated as present or potential beneficial use for municipal and domestic supply, agricultural supply, industrial service supply and industrial process supply (SARWQCB, 1995).

Based on site closure summary information, groundwater beneath the subject ranged from approximately 5.8 feet bgs to 16.12 feet bgs and flowed at a southwest direction (OCHCA, 2000).

LIMITED EXCAVATION

Objectives and Rationale

The objective of this limited excavation was to remove the petroleum hydrocarbon impacted soil that was detected above 1 ug/kg in soil in the area of the UST pit. The removal of the impacted petroleum hydrocarbon soil source was proposed to reduce the potential impacts to groundwater. All work was conducted by a geologist or scientist working under the direct supervision of a Professional Engineer employed by ATLAS.

Limited Excavation

On April 27, 2010, a limited excavation was conducted to remove the petroleum hydrocarbon impacted soil detected during UST removal activities in January 2010. The excavation was conducted by Coast Line Community College Districts' subcontractor and observed by ATLAS personnel. Approximately 2 to 3 feet of soil was removed from the bottom of the tank pit to total depths of approximately 10 to 12 feet bgs. Groundwater was encountered during excavation at approximately 12 feet bgs. Impacted soil was also removed from the sidewalls and more specifically in the area of previous sidewall sample T1-W. At the end of the excavation, the UST pit was approximately 20' X 20'. Excavation was conducted using a back-hoe. A total of 66 tons of petroleum hydrocarbon impacted soil were transported off-site to Western Environmental located in Mecca, California for disposal. The approximate area of excavation is outlined on **Figure 2**, the excavation is detailed on **Figure 3** and waste manifests are included in **Appendix C**.

Confirmation Soil Sample Collection

On April 27, 2010, a total of eight (8) confirmation soil samples EX1 through EX4 and SW1 through SW4 were collected at the excavation terminus and sidewall excavation terminus under the direction of the OCHCA inspector and submitted to a California State certified laboratory for chemical analysis. Soil sample locations are shown on **Figure 3** and specific details of soil sampling procedures, field screening methods and decontamination procedures are presented in **Appendix C**.

Laboratory Analysis and Chain-of-Custody

A total of eight (8) confirmation soil samples EX1 through EX4 and SW1 through SW4 were analyzed by Alpha Scientific Corporation of Cerritos, California, a California State certified laboratory. The soil samples were analyzed for the presence of Total Petroleum Hydrocarbon as gasoline (TPHg), diesel (TPHd), and oil (TPHo) by EPA Method 8015M and full scan volatile organic compounds (VOCs) with fuel oxygenates by EPA Method

8260B. The samples were labeled with a unique sample identification number, name of collector, time and date of collection, and requested analyses. This information was transferred to a standard chain-of-custody form to track the sample handling until delivery to the analytical laboratory. The samples were placed on ice, in an ice chest, pending delivery to the analytical laboratory at the end of the sampling day.

Soil Analytical Results

Laboratory analysis of soil samples SW1-10, SW2-12, SW4-10, EX3-12, and EX4-12 did not detect TPHg, TPHd, TPHo, VOCs, or fuel oxygenates at concentrations exceeding laboratory detection limits.

Laboratory analysis of soil sample SW3-10 detected TPHg at a concentration of 83.4 mg/kg and TPHd at a concentration of 6.5 mg/kg. TPHo, VOCs, or fuel oxygenates were not detected at concentrations exceeding laboratory detection limits.

Laboratory analysis of soil sample EX1-12 detected TPHg at a concentration of 1.0 mg/kg, TPHd at a concentration of 12.9 mg/kg, Isopropylbenzene at a concentration of 0.003 mg/kg, Ethylbenzene at a concentration of 0.005 mg/kg, n-Propylbenzene at a concentration of 0.005 mg/kg, Sec-Butylbenzene at a concentration of 0.003 mg/kg, Naphthalene at a concentration of 0.005 mg/kg, n-Butylbenzene at a concentration of 0.003 mg/kg, and MTBE at a concentration of 0.033 mg/kg. TPHo and all other VOCs or fuel oxygenates were not detected at concentrations exceeding laboratory detection limits.

Laboratory analysis of soil sample EX2-12 detected TPHg at a concentration of 0.9 mg/kg, Total Xylenes at a concentration of 0.031 mg/kg, n-Propylbenzene at a concentration of 0.025 mg/kg, 1,3,5-Trimethylbenzene at a concentration of 0.021 mg/kg, 1,2,4-Trimethylbenzene at a concentration of 0.028 mg/kg, and n-Butylbenzene at a concentration of 0.005 mg/kg. TPHd, TPHo, and all other VOCs or fuel oxygenates were not detected at concentrations exceeding laboratory detection limits.

The soil sample locations are shown on **Figure 3** and historic soil analytical results are summarized in **Tables 1** and **2**. The soil analytical reports and associated chain-of-custody documentation are included in **Appendix D**.

Backfill

Subsequent to excavation and confirmation soil sampling activities, the excavation was backfilled using pea gravel and surface completed with concrete.

SITE INVESTIGATION

Objectives and Rationale

The objective of this site investigation was to provide vertical and lateral definition of the petroleum hydrocarbon impacted soil in the area of the former two (2) 1,000-gallon UST complex. In order to provide this information, ATLAS advanced five (5) exploratory borings (VB1 through VB5) in the area of the former UST complex. The initial boring, B1, was advanced in the center of the former UST complex and borings VB2 through VB5 were advanced just north, south, east, and west of the former complex. Previously proposed boring VB6 was not advanced since further assessment for possible vapor encroachment would be determined based on the current soil conditions established during the current investigation findings. Since groundwater is estimated at approximately 13 feet bgs, a groundwater grab sample was also collected from boring VB1 to assess the water quality directly beneath the former UST complex, and full purge and sample collection were conducted from existing groundwater monitoring wells MW-1 through MW-10. All work was conducted by a geologist or scientist working under the direct supervision of a Professional Engineer employed by ATLAS.

Exploratory Borings and Sample Collection

On May 25, 2010, ATLAS advanced five (5) soil borings VB-1 through VB-5 using a direct-push sampling rig. All soil borings were advanced to approximately 30 feet bgs. Soil samples were collected at 5-foot intervals, commencing at 5 feet for borings VB-2 through VB-5 and 15 feet for boring VB-1 located in the former UST pit, to the maximum depth explored. Each soil sample was screened in the field for the presence of organic vapors using an organic vapor analyzer (OVA) meter. The vapor concentrations were recorded on each boring log. Soil boring locations are shown on **Figures 2** and **3** and boring logs, permits, specific details of field drilling methods, field screening techniques, and decontamination procedures are presented in **Appendix E**.

Groundwater Sample Collection

On May 25, 2010, one (1) groundwater grab sample was collected from boring B1 using a Hydropunch™ sampling tool and on May 20, 2010, ten (10) groundwater samples were collected from existing wells MW-1 through MW-10 using a vacuum truck to purge and a bailer to sample each well. Groundwater well locations are shown on **Figure 2** and groundwater sampling, decontamination procedures, purge sheets, a field project status report, and waste manifests are presented in **Appendix F**.

Laboratory Analysis and Chain-of-Custody Documentation

All soil and grab groundwater samples collected were submitted to a California certified laboratory for analysis of TPHg, TPHd and full scan VOCs by EPA Methods 8015M and 8260B. The groundwater samples collected from wells MW-1 through MW-10 were also submitted to a California certified laboratory for analysis of TPHg and full scan VOCs by EPA Method GC/MS and 8260B, respectively. Please note, due to the non-detection and one (1) trace detection in soil and non-detection in the grab groundwater sample VB-1, continued analysis of TPHd in groundwater samples MW-1 through MW-10 was not determined economically feasible and therefore was excluded from the analysis.

Each sample collected was labeled with a unique sample identification number, name of collector, time and date of collection, and requested analyses. This information was transferred to a standard chain-of-custody form to track the sample handling until delivery to the analytical laboratory. All samples were placed on ice, in an ice chest and delivered to the laboratory at the end of each field day.

FINDINGS

Subsurface Lithology

Based on soil samples collected during this investigation, soil conditions beneath the subject site generally consists of sandy clay extending from just beneath the surface cover to approximately 10 feet bgs, followed by silty sand with interbedded sandy clay to the total depth explored, approximately 30 feet bgs, with a gravel and sand layer (used as backfill in the area of the former UST pit) present from approximately 1 foot to 12 feet bgs (in boring VB-1). Detailed boring logs associated with this investigation are included in **Appendix E**. Cross section reference lines A-A' and B-B' are shown on **Figure 4** and cross section diagrams, depicting the subsurface lithology are shown on **Figures 5** and **6**.

Groundwater Conditions

During the limited excavation and boring advancement activities, groundwater was first encountered at approximately 12 feet bgs. The depth to groundwater measured during the groundwater monitoring well sampling event ranged from 7.50 to 9.75 feet from the top of the well casing. Based on a level survey of the well heads and depth to water measured, the general groundwater flow direction across the site was southwest with mounding in well MW-3 and a depression in well MW-7, at a gradient of approximately 0.006 feet per foot. Groundwater gauging data is summarized on **Table 3** and groundwater elevation contour map is shown on **Figure 7**.

Soil Analytical Results

A total of twenty-eight (28) soil samples were collected during the soil boring advancement. Laboratory analysis of soil samples collected from soil boring VB-2 did not detect TPHg, TPHd, TPHo, VOCs, or fuel oxygenates at concentrations exceeding laboratory detection limits. Laboratory analysis of soil samples collected from boring VB-1 detected TPHg at a concentration of 0.8 mg/kg (at 15 feet bgs). TPHd, TPHo, VOCs, or full oxygenates were not detected at concentrations exceeding laboratory detection limits.

Laboratory analysis of soil samples collected from boring VB-3 detected TPHg at a concentration of 104 mg/kg (at 10 feet bgs), TPHd at a concentration of 9.6 mg/kg (at 10 feet bgs), Benzene at a concentration of 0.682 mg/kg (at 10 feet bgs), Isopropylbenzene at a concentration of 0.669 mg/kg (at 10 feet bgs), Ethylbenzene at a concentration of 2.46 mg/kg (at 10 feet bgs), n-Propylbenzene at a concentration of 2.15 mg/kg (at 10 feet bgs), 1,3,5-Trimethylbenzene at a concentration of 0.448 mg/kg (at 10 feet bgs), 1,2,4-Trimethylbenzene at a concentration of 1.54 mg/kg (at 10 feet bgs), Sec-Butylbenzene at a concentration of 0.293 mg/kg (at 10 feet bgs), n-Butylbenzene at a concentration of 0.509 mg/kg (at 10 feet bgs), Naphthalene at a concentration of 2.60 mg/kg (at 10 feet bgs), MTBE at concentrations of 0.425 mg/kg and 0.002 mg/kg (at 10 feet bgs and 25 feet bgs, respectively), and TBA at a concentration of 0.184 mg/kg (at 15 feet bgs, respectively. TPHo, all other VOCs and fuel oxygenates were not detected at concentrations exceeding laboratory detection limits.

Laboratory analysis of soil samples collected from boring VB-4 detected 1,2,4-Trichlorobenzene at a concentration of 4.8 mg/kg (at 15 feet bgs), Naphthalene at a concentration of 6.5 mg/kg (at 15 feet bgs), and 1,2,3-Trichlorobenzene at a concentration of 6.2 mg/kg (at 15 feet bgs). TPHg, TPHd, TPHo, all other VOCs and fuel oxygenates were not detected at concentrations exceeding laboratory detection limits.

Laboratory analysis of soil samples collected from boring VB-5 detected TPHg at a concentration of 6.8 mg/kg (at 15 feet bgs). TPHd, TPHo, VOCs, and fuel oxygenates were not detected at concentrations exceeding laboratory detection limits. Soil analytical results are summarized in **Tables 1** and **2**. The laboratory analytical report and chain-of-custody documentation are included in **Appendix G**.

Groundwater Analytical Results

Laboratory analysis of grab groundwater sample collected from boring VB-1 detected TPHg at a concentration of 94 ug/L, Isopropylbenzene at a concentration of 2.1 ug/L, Ethylbenzene at a concentration of 10.0 ug/L, n-Propylbenzene at a concentration of 6.3 ug/L, 1,3,5-Trimethylbenzene at a concentration of 2.4 ug/L, 1,2,4-Trimethylbenzene at a concentration of 12.1 ug/L, n-Butylbenzene at a concentration of 1.6 ug/L, Naphthalene at concentration of 2.2 ug/L, and DIPE at a concentration of 1.1 ug/L. TPHd, TPHo, all other VOCs and fuel oxygenates were not detected at concentrations exceeding laboratory detection limits.

Laboratory analysis of groundwater samples collected from wells MW-1 through MW-10 detected TPHg at concentrations of 340 ug/L and 64 ug/L in wells MW-3 and MW-8, respectively, Benzene concentration in well MW-3 at 31.0 ug/L, Ethylbenzene concentration in well MW-3 at 0.6 ug/L, MTBE concentrations in well MW-4 and MW-8 at 3.4 ug/L and 1.2 ug/L, respectively, TBA concentration in well MW-4 at 94.4 ug/L, Isopropylbenzene concentrations ranging from less than the laboratory detection limit to 9.6 ug/L, n-Propylbenzene concentrations ranging from less than the laboratory detection limit to 12.2 ug/L, Sec-Butylbenzene concentration in well MW-3 at 1.3 ug/L, n-Butylbenzene concentration in well MW-3 at 1.1 ug/L, Naphthalene concentrations in well MW-4 and MW-8 at 6.3 ug/L and 1.1 ug/L, respectively, and cis-1,2-Dichloroethene concentrations in well MW-3 and MW-6 at 10.0 ug/L and 1.5 ug/L, respectively. All other VOCs or fuel oxygenates were not detected at concentrations exceeding laboratory detection limits. Grab groundwater analytical results are summarized in **Table 3** and groundwater analytical results are summarized in **Tables 4 and 5**. TPHg, Benzene, MTBE, and TBA concentrations in groundwater are shown on **Figures 8** through **11**. Groundwater analytical reports and chain-of-custody documentation are included in **Appendix G**.

SUMMARY

- On May 27, 2010, ATLAS observed the excavation and removal of petroleum hydrocarbon impacted soil that was detected in soil samples collected subsequent to UST removal activities in January 2007.
- Approximately 66 tons of TPH impacted soil were transported off-site for disposal.
- Groundwater was encountered at approximately 12 feet bgs during excavation activities.

- On May 27, 2010, subsequent to excavation activities, eight (8) confirmation soil samples were collected under the direction of the OCHCA inspector and submitted for chemical analysis. Laboratory analysis of soil samples revealed maximum concentrations of TPHg at 83.4 mg/kg (SW3-10), TPHd at 12.9 mg/kg (EX1-12), Ethylbenzene at 0.005 mg/kg (EX1-12), Xylenes at 0.031 mg/kg (EX2-12), MTBE at 0.033 mg/kg (EX1-12), 1,3,5-Trimethylbenzene at 0.021 mg/kg (EX2-12), 1,2,4-Trimethylbenzene at 0.028 mg/kg (EX2-12), Sec-Butylbenzene at 0.003 mg/kg (EX1-12), n-Butylbenzene at 0.005 mg/kg (EX2-12), Naphthalene at 0.005 mg/kg (EX1-12), Isopropylbenzene at 0.003 mg/kg (EX1-12), and n-Propylbenzene at 0.025 mg/kg (EX2-12).

- Maximum concentrations were predominantly detected in soil samples EX1-12 or EX2-12 with the exception of the maximum TPHg concentration which was detected in soil sample SW3-10.

- On May 25, 2010, ATLAS advanced five (5) direct-push borings, VB1 through VB-5, to a maximum depth of approximately 30 feet bgs.

- Groundwater was encountered at approximately 12 feet bgs during boring advancement activities.

- One (1) grab groundwater sample was collected from boring VB1 (using a Hydropunch tool) and submitted to a laboratory for chemical analysis.

- On May 25, 2010, during boring advancement activities, a total of twenty-eight (28) soil samples were collected and submitted to a laboratory for chemical analysis. Laboratory analysis of soil samples detected revealed maximum concentrations of TPHg at 104 mg/kg (VB3-10), TPHd at 9.6 mg/kg (VB3-10), Benzene at 0.682 mg/kg (VB3-10), Ethylbenzene at 2.46 mg/kg (VB3-10), MTBE at 0.425 mg/kg (VB3-10), TBA at 0.184 mg/kg (VB3-15), 1,3,5-Trimethylbenzene at 0.448 mg/kg (VB3-10), 1,2,4-Trimethylbenzene at 1.54 mg/kg (VB3-10), Sec-Butylbenzene at 0.293 mg/kg (VB3-10), n-Butylbenzene at 0.509 mg/kg (VB3-10), Naphthalene at 6.5 mg/kg (VB4-15), Isopropylbenzene at 0.669 mg/kg (VB3-10), 1,2,3-Trichlorobenzene at 6.2 mg/kg (VB4-15), 1,2,4-Trichlorobenzene at 4.8 mg/kg (VB4-15), and n-Propylbenzene at 2.15 mg/kg (VB3-10).

- Maximum concentrations were predominantly detected in soil boring VB3 at 10 feet bgs, with the exceptions of TBA in sample VB3 at 15 feet bgs and Naphthalene and 1,2,4-Trichlorobezene in boring VB4 at 15 feet bgs.

- Grab groundwater sample from boring VB1 detected concentrations of TPHg at 94 ug/L, Ethylbenzene at 10 ug/L, DIPE at 1.1 ug/L, Isopropylbenzene at 2.1 ug/L, n-

Propylbenzene at 6.3 ug/L, 1,3,5-Trimethylbenzene at 2.4 ug/L, 1,2,4-Trimethylbenzene at 12.1 ug/L, n-Butylbenzene at 1.6 ug/L, and Naphthalene at 2.2 ug/L. TPHd, Benzene, MTBE, ETBE, TAME, or TBA were not detected at concentrations exceeding laboratory detection limits.

- On May 20, 2010, ATLAS gauged all wells, purged and collected groundwater samples from existing wells MW-1 through MW-10. Depth to groundwater during sampling ranged from 7.50 feet to 9.75 feet below the top of the well casing. Based on a level survey of the well heads and depth to groundwater, the data indicated that the groundwater flow direction was to the southwest at a gradient of approximately 0.006 ft/ft.

- Laboratory analysis of groundwater samples detected maximum concentrations of TPHg at 340 ug/L (MW-3), Benzene at 31.0 ug/L (MW-3), Ethylbenzene at 0.6 ug/L (MW-3), MTBE at 3.4 ug/L (MW-4), and TBA concentration of 94.4 ug/L (MW-4).

- Maximum concentrations in groundwater were predominantly detected in well MW-3 with the exceptions of MTBE and TBA in well MW-4.

DISCUSSION AND RECOMMENDATIONS

A review of the limited excavation conducted and confirmation samples collected at the excavation terminus revealed that the majority of the petroleum hydrocarbon impacted soil detected during UST removal activities was removed. Prior to the limited soil excavation, initial maximum TPHg concentrations were 180 mg/kg, TPHd concentrations were 20 mg/kg, and BTEX concentrations were 4.9 mg/kg (Xylene). After the limited soil excavation, final maximum concentrations detected for TPHg was at 83.4 mg/kg, TPHd at12.9 mg/kg, BTEX concentrations at 0.031 mg/kg (Xylene), and MTBE at 0.033 mg/kg. Very low to trace concentrations of Sec-Butylbenzene, n-Butylbenzene, Naphthalene, Isopropylbenzene, and n-Propylbenzene were also detected in samples EX1-12 and EX2-12. Benzene, ETBE, DIPE, TAME, or TBA were not detected in any of the confirmation soil samples. Verification boring sample VB-1 advanced to define the lateral definition of petroleum hydrocarbon impacted soil in the UST excavation only detected TPHg at a concentration of 0.8 mg/kg at 15 feet bgs. Laboratory analysis of soil samples collected below the 15-foot depth to the maximum depth explored, 30 feet bgs, did not detect TPHg, TPHd, VOCs, or fuel oxygenates at concentrations exceeding the laboratory detection limit.

Laboratory analysis of verification borings VB-2 through VB5, advanced outside the perimeter of the UST excavation, to establish lateral definition of the petroleum hydrocarbon impacted soil, detected petroleum hydrocarbon concentrations at the 10 and

15 foot depth with less than detectable concentrations from below the 15 foot depth to the maximum depth explored, 30 feet bgs. Although petroleum hydrocarbon concentrations were detected in borings VB-3, VB-4 and VB-5, the samples that exhibited any minor significance were collected from boring VB-3 at 10 and 15 feet bgs. Laboratory analysis of soil samples collected from boring VB-3 detected concentrations of TPHg at 104 mg/kg, TPHd at 9.6 mg/kg, BTEX ranging from less than laboratory detection limits to 2.46 mg/kg (Ethylbenzene), MTBE concentration of 0.425 mg/kg, and TBA concentration of 0.184 mg/kg. Other VOCs such as Sec-Butylbenzene, n-Butylbenzene, Naphthalene, Isopropylbenzene, and n-Propylbenzene were detected at low concentrations. Petroleum hydrocarbon concentrations detected in boring VB-3 were most likely residual concentrations from the previous remediation conducted at the subject site since dispenser sample D1 collected nearby was non-detectable for constituents of concern and vapor extraction wells VES1 and VES2 installed southeast of the boring were also most likely installed to capture soil vapor in this vicinity since the previous remedial excavation in 1995 did not include this area.

A review of the current groundwater concentrations in comparison to the historic groundwater concentrations in 2000, were considerably lower. Maximum site closure concentrations in 2000 were 24,000,000 ug/L for TPHg, 300 ug/L for Benzene, 140 ug/L for Toluene, 2,400 ug/L for Ethylbenzene, 3,700 ug/L for Xylenes, and 370 ug/L for MTBE. Current maximum concentrations (including the grab groundwater sample) were 340 ug/L for TPHg, 31.0 ug/L for Benzene, 0.6 ug/L Ethylbenzene, 3.4 ug/L for MTBE, and 94.4 ug/L for TBA. Groundwater samples also detected trace to low concentrations of cis-1,2-Dichloroethene, Isopropylbenzene, n-Propylbenzene, Sec-Butylbenzene, n-Butylbenzene, and Naphthalene. Current groundwater concentrations remain below maximum contaminant levels (MCLs) with the exception of a localized Benzene concentration in well MW-3 and TBA in well MW-4. However, as mentioned, current concentrations are low and have dramatically decreased from 2000 levels. The following a brief summary of historic and current soil and groundwater concentrations detected and remedial technology and estimated petroleum hydrocarbon mass removed:

	Soil		Water	
Constituent of Concern	**Historic Maximum (mg/kg)**	**Current Maximum (mg/kg)**	**Historic Maximum (ug/L)**	**Current Maximum (ug/L)**
TPHg	180	104	24,000,000	340
TPHd	20	12.9	--	<500
Benzene	0.026	0.682	300	31
Toluene	0.042	<0.001	140	<0.5
Ethylbenzene	3.3	2.46	2,400	0.6J
Xylenes	4.9	0.031	3,700	<1
MTBE	<0.002	0.425J	370	3.4
ETBE	<0.002	<0.002	--	<1
DIPE	<0.002	<0.002	--	<1
TAME	<0.002	<0.002	--	<1
TBA	<0.020	0.184	--	94.4
Notes:				
J	Trace Concentration		--	Not Available
<0.40	Less than laboratory detection limit stated			

Remedial Action			
Treatment Technology	**Date**	**Mass Removed (Ton)**	
Soil Excavation	05/12/2010	66	

Therefore, ATLAS recommends no further action, natural attenuation for the remaining petroleum hydrocarbons in soil and groundwater and case closure based on the following information:

1) The majority of petroleum hydrocarbon impacted soil source was removed to the best extent possible, therefore reducing a continued petroleum hydrocarbon source to groundwater.

2) The petroleum hydrocarbon impacted soil was fully defined vertically and laterally with laboratory analytical results confirming relatively trace to low soil concentrations.

3) Groundwater concentrations at the subject site are below MCLs with the exception of TBA concentration in well MW-4 and localized Benzene concentration in well MW-3.

CLOSING

The work conducted by ATLAS has been performed using methods and procedures accepted in the environmental field. ATLAS makes no other warranty, either expressed or implied, concerning the information that is contained within this report. The analysis of soil samples was performed by a California certified laboratory, however, no warranty as to the validity of the work conducted by the independent Laboratory is implied.

This report is valid as of this date. However, as a result of the passage of time and changing site conditions or integrity of the underground tanks, piping and dispensing equipment, deviations to the information contained in this report may occur. Accordingly, information presented in later reports may invalidate this report in partial or whole form. These conditions are beyond the control of ATLAS, and should be considered in basing continuing assessments on the information contained herein after the passage of time.
This report has been prepared at the request and authorization of the Coast Community College District. Submittal of this report to appropriate agencies/parties is considered the responsibility of Coast Community College District. Should you have any questions or comments concerning this report please contact the undersigned at (714) 890-7129.

Sincerely,
ATLAS ENVIRONMENTAL ENGINEERING, INC.



Jasmine F. Senn
Project Scientist

Karl H. Kerner, P.E.
Project Manager/Senior Engineer

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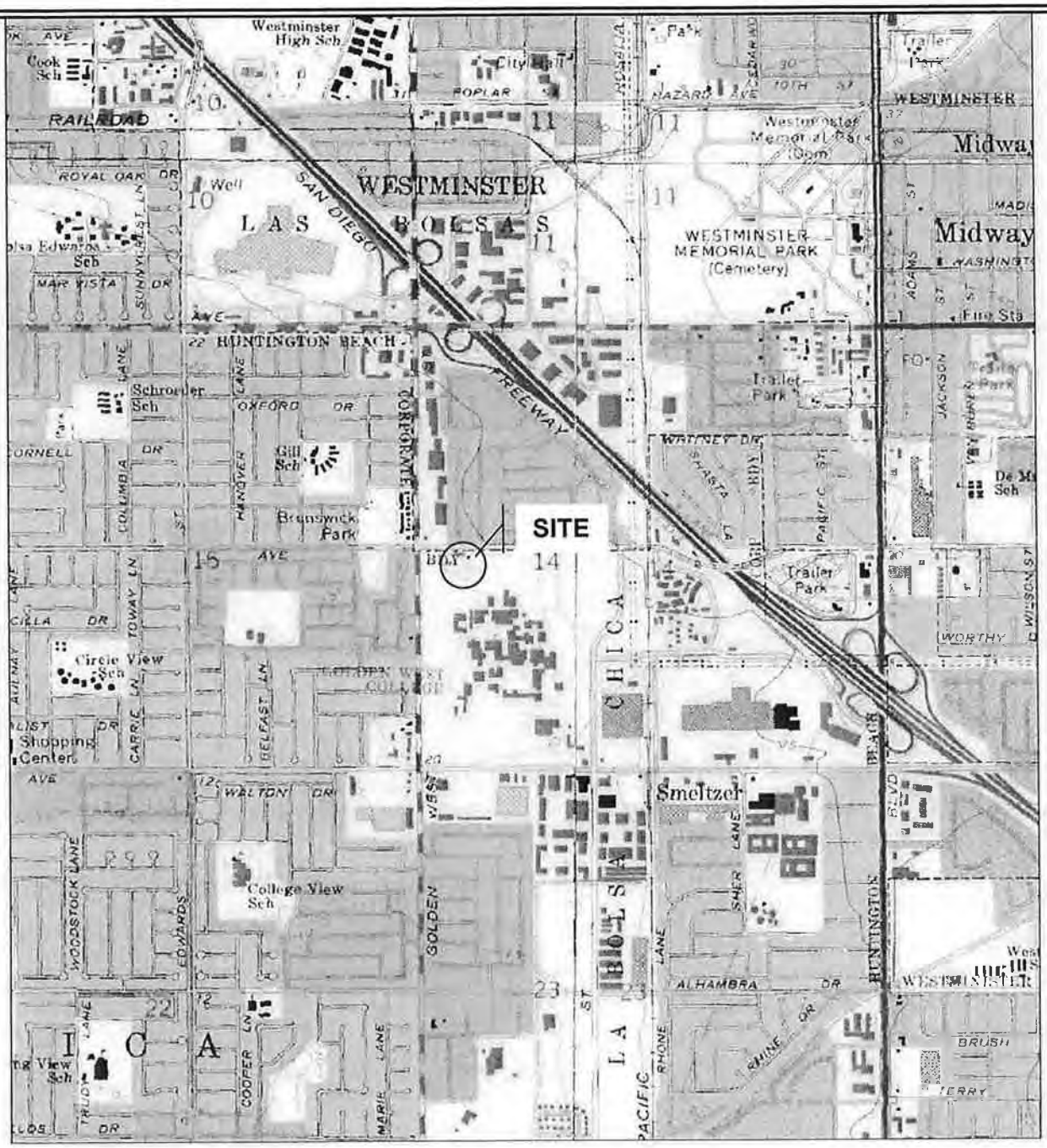
FIGURES



Map: 7.5' USGS Topographic Map Newport Beach Quadrangle
Date: <1965> (photorevised 1981)
Scale: 1: 25000

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Costa Mesa, CA 92626

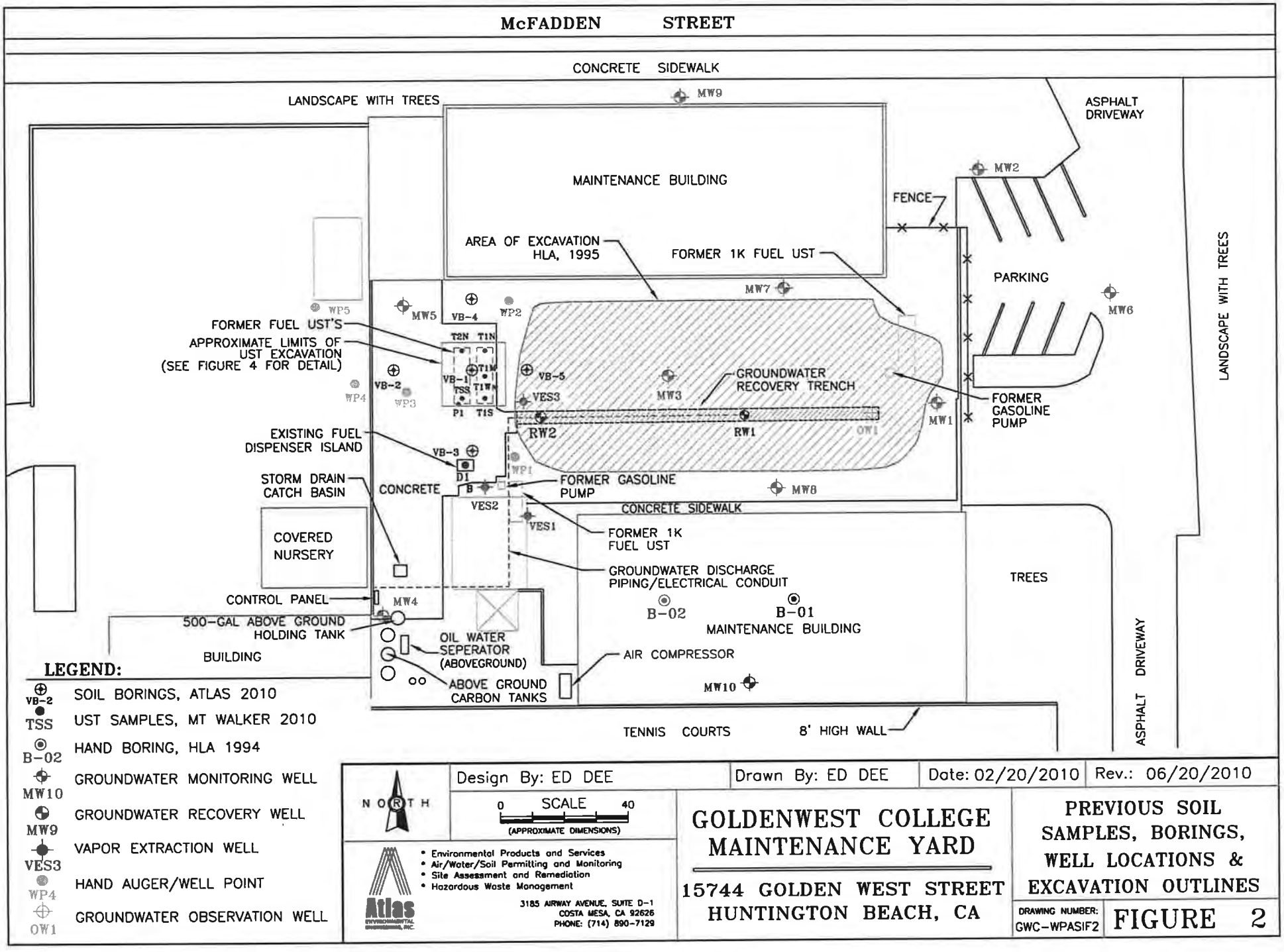
GOLDEN WEST COLLEGE (MAINTENANCE YARD)

15744 GOLDENWEST STREET
HUNTINGTON BEACH, CA

SITE VICINITY MAP

NORTH

FIGURE 1


McFADDEN STREET
CONCRETE SIDEWALK
LANDSCAPE WITH TREES
MW9
MAINTENANCE BUILDING
ASPHALT DRIVEWAY
MW2
FENCE
AREA OF EXCAVATION HLA, 1995
FORMER 1K FUEL UST
PARKING
MW7
MW6
LANDSCAPE WITH TREES
WP5
MW5
VB-4
WP2
FORMER FUEL UST'S
APPROXIMATE LIMITS OF UST EXCAVATION (SEE FIGURE 4 FOR DETAIL)
T2N T1N
VB-1
T1M
TSS T1W
P1 T1S
VB-2
WP4
WP3
VB-5
VES3
MW3
GROUNDWATER RECOVERY TRENCH
FORMER GASOLINE PUMP
MW1
RW2
RW1
OW1
EXISTING FUEL DISPENSER ISLAND
VB-3
D1
WP1
STORM DRAIN CATCH BASIN
CONCRETE
B
FORMER GASOLINE PUMP
MW8
VES2
CONCRETE SIDEWALK
VES1
COVERED NURSERY
FORMER 1K FUEL UST
GROUNDWATER DISCHARGE PIPING/ELECTRICAL CONDUIT
TREES
CONTROL PANEL
MW4
B-02
B-01
MAINTENANCE BUILDING
500-GAL ABOVE GROUND HOLDING TANK
OIL WATER SEPERATOR (ABOVEGROUND)
AIR COMPRESSOR
BUILDING
ABOVE GROUND CARBON TANKS
MW10
ASPHALT DRIVEWAY
TENNIS COURTS
8' HIGH WALL
LEGEND:
VB-2 SOIL BORINGS, ATLAS 2010
TSS UST SAMPLES, MT WALKER 2010
B-02 HAND BORING, HLA 1994
MW10 GROUNDWATER MONITORING WELL
MW9 GROUNDWATER RECOVERY WELL
VES3 VAPOR EXTRACTION WELL
WP4 HAND AUGER/WELL POINT
OW1 GROUNDWATER OBSERVATION WELL
NORTH
0 SCALE 40
(APPROXIMATE DIMENSIONS)
Design By: ED DEE
Drawn By: ED DEE
Date: 02/20/2010
Rev.: 06/20/2010
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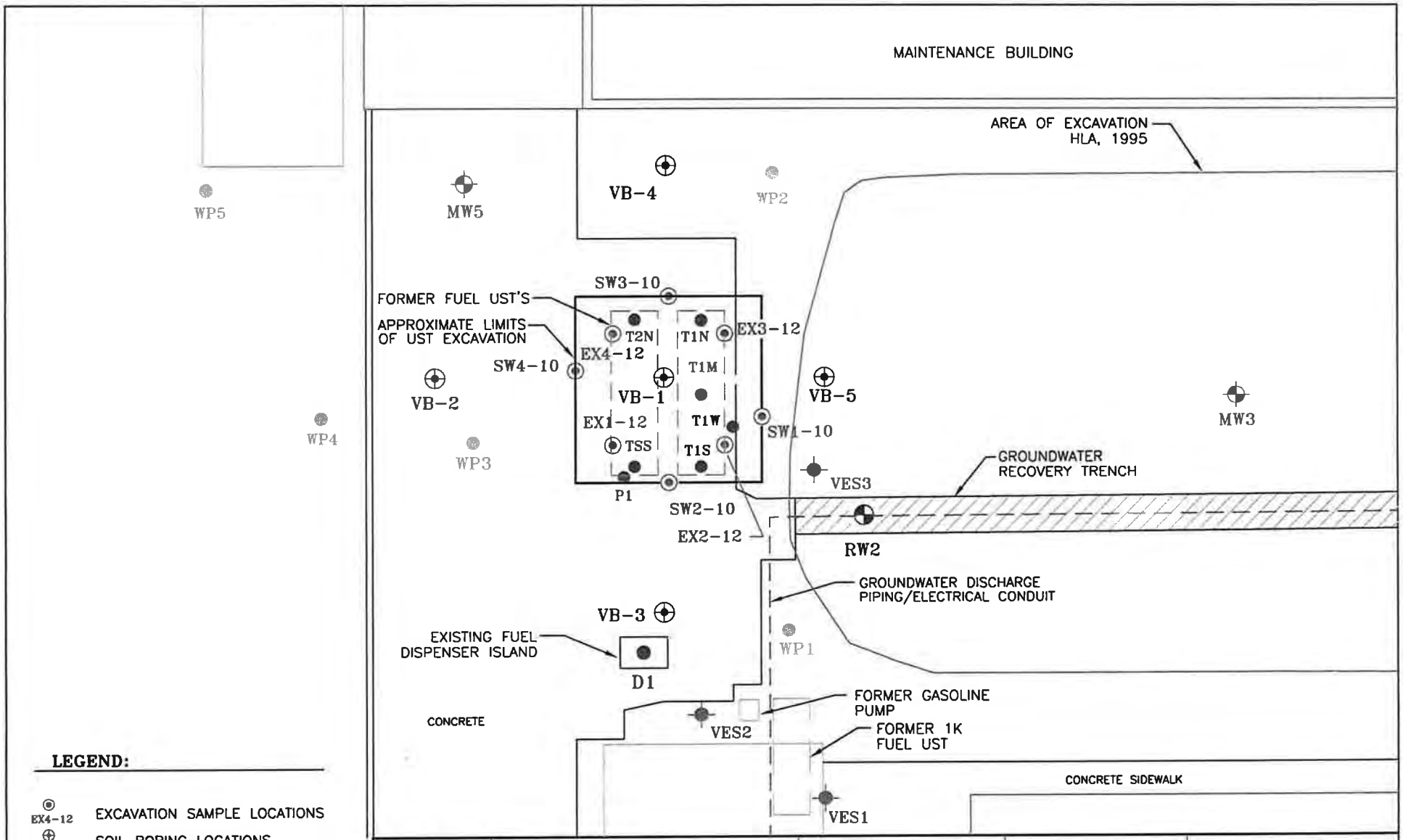
GOLDENWEST COLLEGE MAINTENANCE YARD
15744 GOLDEN WEST STREET
HUNTINGTON BEACH, CA
PREVIOUS SOIL SAMPLES, BORINGS, WELL LOCATIONS & EXCAVATION OUTLINES
DRAWING NUMBER: GWC-WPASIF2
FIGURE 2


MAINTENANCE BUILDING
AREA OF EXCAVATION
HLA, 1995
WP5
MW5
VB-4
WP2
SW3-10
FORMER FUEL UST'S
APPROXIMATE LIMITS
OF UST EXCAVATION
T2N
T1N
EX3-12
EX4-12
SW4-10
T1M
VB-2
VB-1
VB-5
MW3
EX1-12
T1W
SW1-10
WP4
TSS
T1S
WP3
GROUNDWATER
RECOVERY TRENCH
VES3
P1
SW2-10
EX2-12
RW2
GROUNDWATER DISCHARGE
PIPING/ELECTRICAL CONDUIT
VB-3
EXISTING FUEL
DISPENSER ISLAND
WP1
D1
FORMER GASOLINE
PUMP
CONCRETE
VES2
FORMER 1K
FUEL UST
CONCRETE SIDEWALK
VES1
LEGEND:
EX4-12 EXCAVATION SAMPLE LOCATIONS
VB-10 SOIL BORING LOCATIONS
TSS UST SAMPLES, MT WALKER 2010
MW10 GROUNDWATER MONITORING WELL
MW9 GROUNDWATER RECOVERY WELL
VES3 VAPOR EXTRACTION WELL
WP4 HAND AUGER/WELL POINT
NORTH
0 SCALE 15
(APPROXIMATE DIMENSIONS)
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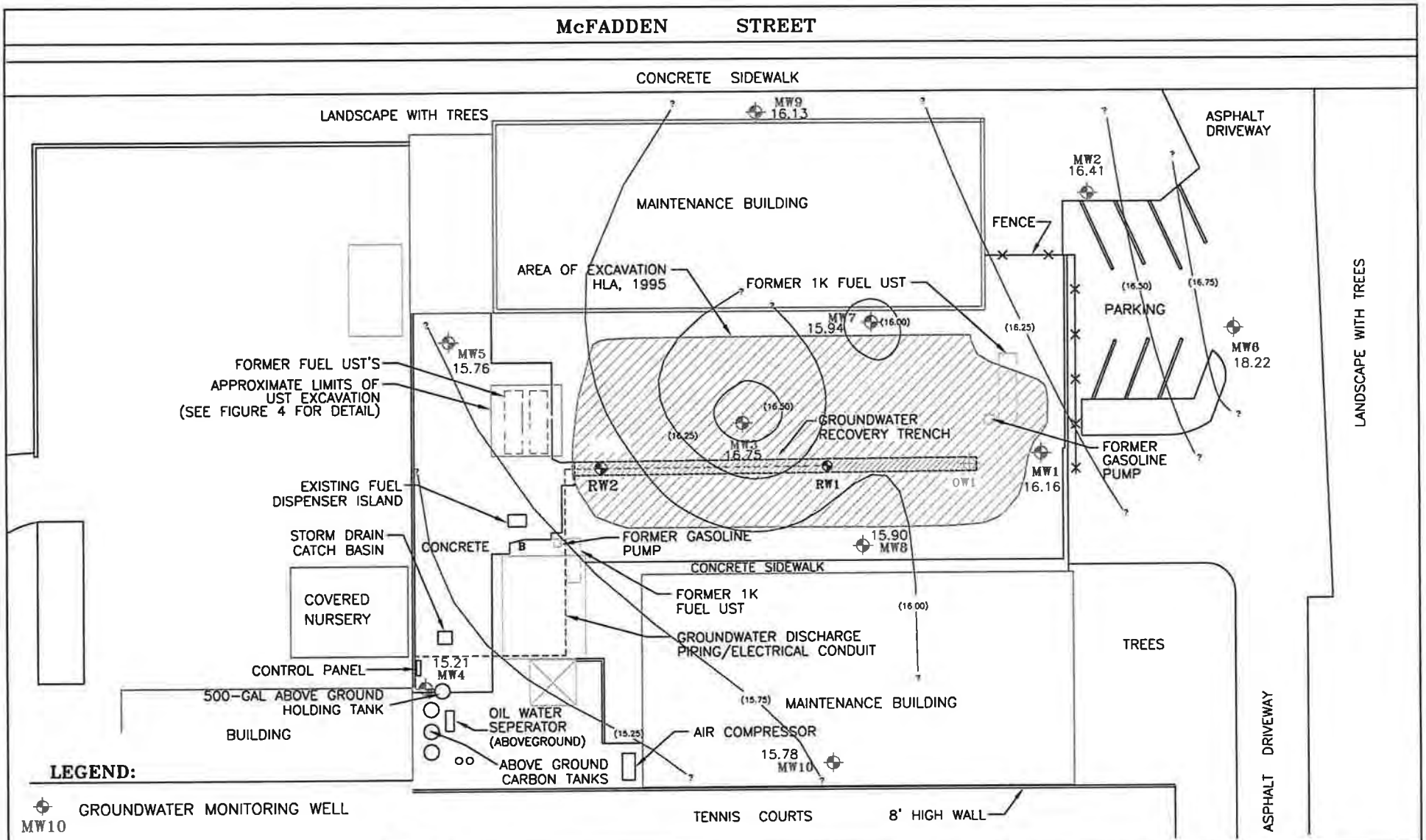
MAINTENANCE YARD
15744 GOLDEN WEST STREET
HUNTINGTON BEACH, CA.
DETAILED AREA OF
EXCAVATION,
CONFIRMATION SOIL
SAMPLES AND BORING
LOCATIONS
DRAWING NUMBER:
GWC-WPASIF3
FIGURE 3


McFADDEN STREET
CONCRETE SIDEWALK
LANDSCAPE WITH TREES
MW9 16.13
ASPHALT DRIVEWAY
MW2 16.41
MAINTENANCE BUILDING
FENCE
AREA OF EXCAVATION HLA, 1995
FORMER 1K FUEL UST
MW7 15.94
(16.00)
(16.50)
(16.75)
PARKING
(16.25)
MW6 18.22
LANDSCAPE WITH TREES
MW5 15.76
FORMER FUEL UST'S
APPROXIMATE LIMITS OF UST EXCAVATION (SEE FIGURE 4 FOR DETAIL)
(16.50)
GROUNDWATER RECOVERY TRENCH
(16.25)
MW3 16.75
FORMER GASOLINE PUMP
MW1 16.16
RW2
RW1
OW1
EXISTING FUEL DISPENSER ISLAND
STORM DRAIN CATCH BASIN
CONCRETE
B
FORMER GASOLINE PUMP
15.90 MW8
CONCRETE SIDEWALK
COVERED NURSERY
FORMER 1K FUEL UST
(16.00)
GROUNDWATER DISCHARGE PIPING/ELECTRICAL CONDUIT
TREES
CONTROL PANEL
15.21 MW4
500-GAL ABOVE GROUND HOLDING TANK
(15.75)
MAINTENANCE BUILDING
BUILDING
OIL WATER SEPERATOR (ABOVEGROUND)
(15.25)
AIR COMPRESSOR
15.78 MW10
ABOVE GROUND CARBON TANKS
TENNIS COURTS
8' HIGH WALL
ASPHALT DRIVEWAY
LEGEND:
MW10 GROUNDWATER MONITORING WELL
MW9 GROUNDWATER RECOVERY WELL
OW1 GROUNDWATER OBSERVATION WELL
18.22 GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL (MSL) MEASURED ON 05/20/2010
(16.75) GROUNDWATER ELEVATION CONTOUR IN FEET ABOVE MASL (DASHED WHERE INFERRED)
RESULT IS BETWEEN THE RL AND THE MDL; TRACE CONCENTRATION
NORTH
0 SCALE 40'
(APPROXIMATE DIMENSIONS)
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Drawn By: ED DEE
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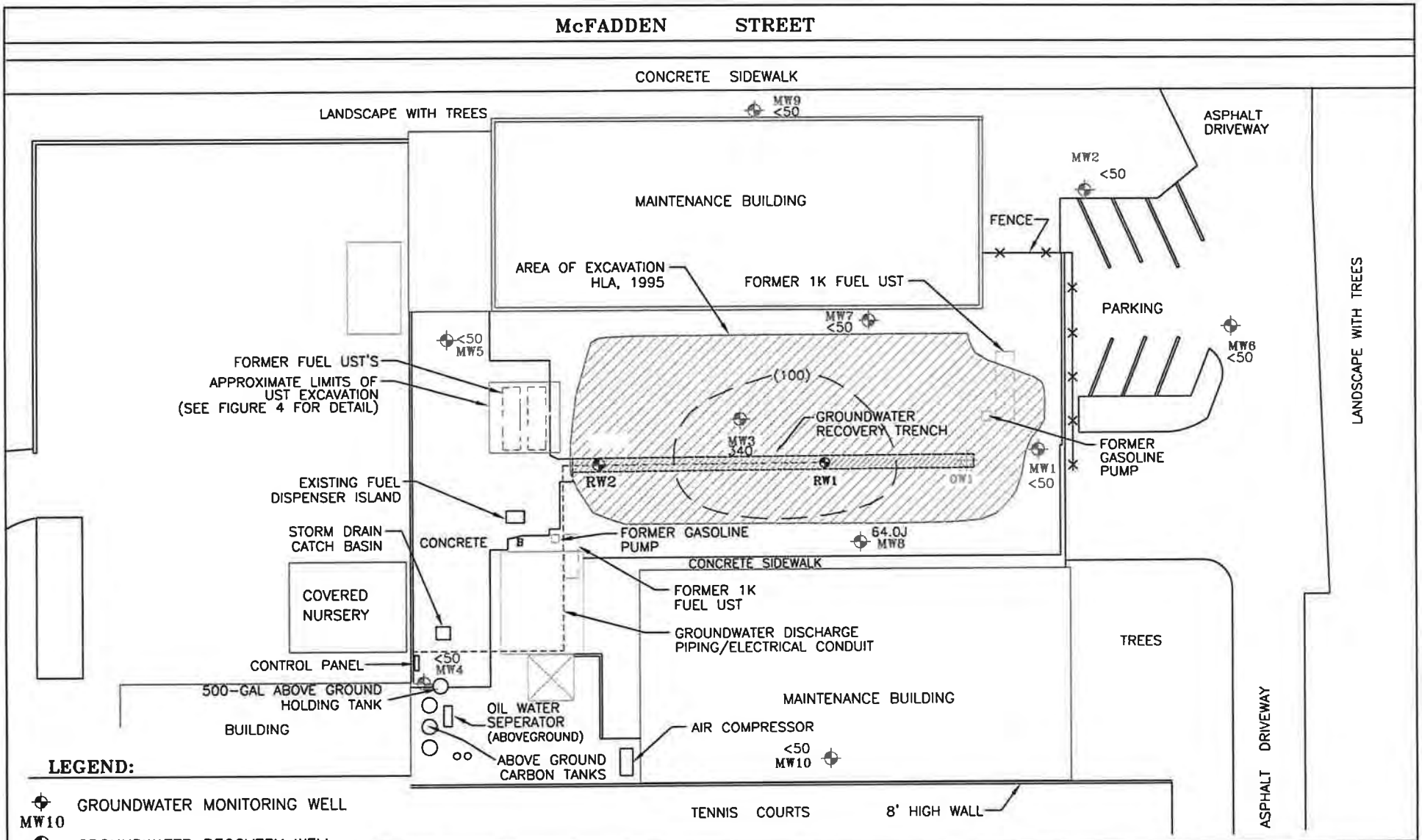
GROUNDWATER ELEVATION CONTOUR MAP
DRAWING NUMBER: GWC-WPASIF3
FIGURE 7


McFADDEN STREET
CONCRETE SIDEWALK
LANDSCAPE WITH TREES
MW9 <50
ASPHALT DRIVEWAY
MW2 <50
MAINTENANCE BUILDING
FENCE
AREA OF EXCAVATION HLA, 1995
FORMER 1K FUEL UST
PARKING
MW7 <50
<50 MW5
MW6 <50
LANDSCAPE WITH TREES
FORMER FUEL UST'S
APPROXIMATE LIMITS OF UST EXCAVATION (SEE FIGURE 4 FOR DETAIL)
(100)
GROUNDWATER RECOVERY TRENCH
MW3 340
FORMER GASOLINE PUMP
RW2
RW1
OW1
MW1 <50
EXISTING FUEL DISPENSER ISLAND
STORM DRAIN CATCH BASIN
CONCRETE
FORMER GASOLINE PUMP
64.0J MW8
CONCRETE SIDEWALK
COVERED NURSERY
FORMER 1K FUEL UST
GROUNDWATER DISCHARGE PIPING/ELECTRICAL CONDUIT
TREES
CONTROL PANEL
<50 MW4
500-GAL ABOVE GROUND HOLDING TANK
MAINTENANCE BUILDING
BUILDING
OIL WATER SEPERATOR (ABOVEGROUND)
AIR COMPRESSOR
ABOVE GROUND CARBON TANKS
<50 MW10
ASPHALT DRIVEWAY
TENNIS COURTS
8' HIGH WALL
LEGEND:
MW10 GROUNDWATER MONITORING WELL
MW9 GROUNDWATER RECOVERY WELL
OW1 GROUNDWATER OBSERVATION WELL
340 TPHg CONCENTRATION IN PARTS PER BILLION (ppb), 05/20/2010
<50 LESS THAN LABORATORY DECTECTION LIMITS
(100) TPHg ISO-CONCENTRATION CONTOUR IN ppb (DASHED WHERE INFERRED)
J RESULT IS BETWEEN THE RL AND THE MDL; TRACE CONCENTRATION
NORTH
0 SCALE 40'
(APPROXIMATE DIMENSIONS)
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Drawn By: ED DEE
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Rev.: 06/20/2010
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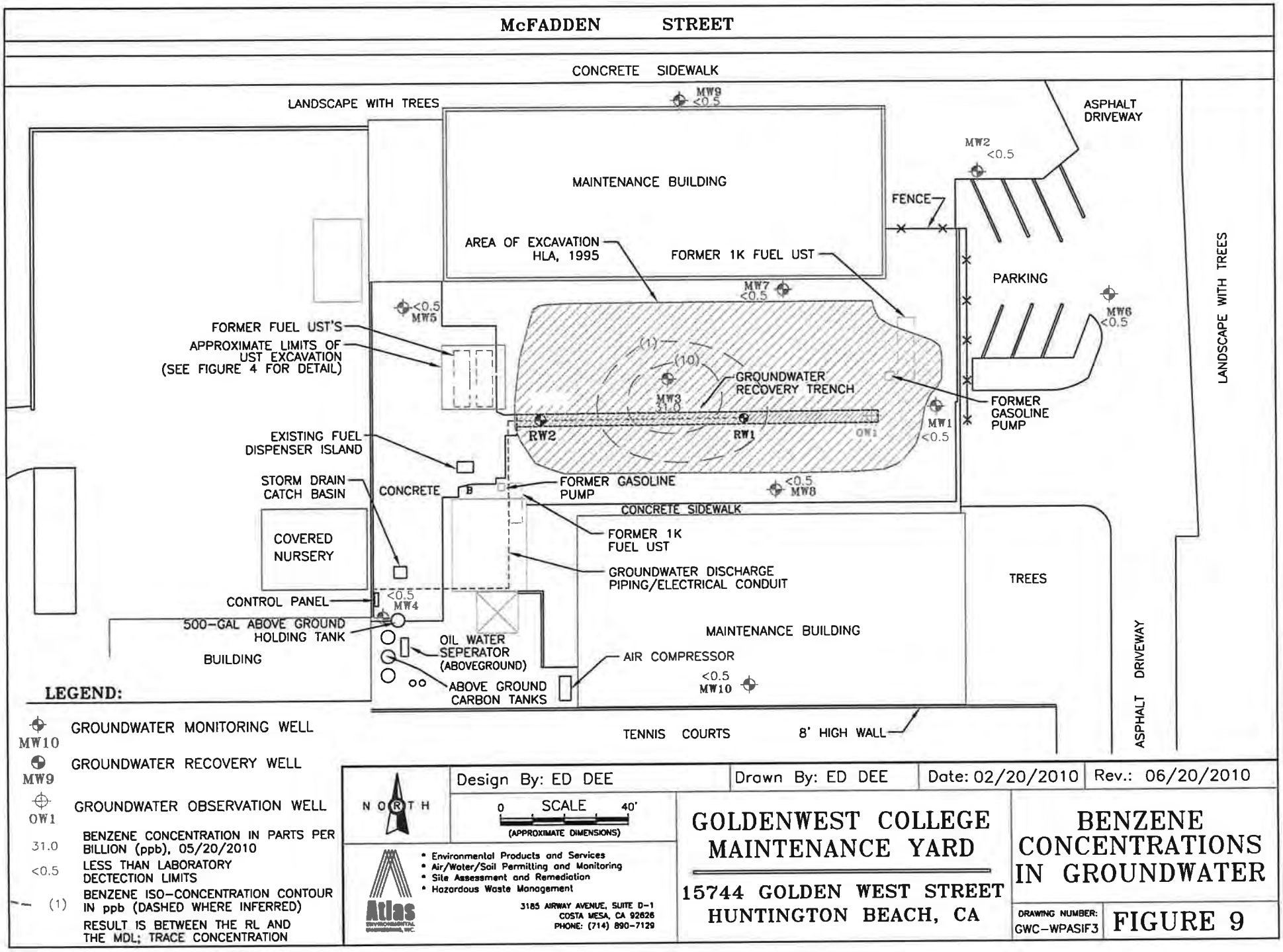
HUNTINGTON BEACH, CA
TPHg CONCENTRATIONS IN GROUNDWATER
DRAWING NUMBER: GWC-WPASIF3
FIGURE 8


McFADDEN STREET
CONCRETE SIDEWALK
LANDSCAPE WITH TREES
MW9 <0.5
ASPHALT DRIVEWAY
MW2 <0.5
MAINTENANCE BUILDING
FENCE
AREA OF EXCAVATION HLA, 1995
FORMER 1K FUEL UST
PARKING
MW7 <0.5
<0.5 MW5
MW6 <0.5
LANDSCAPE WITH TREES
FORMER FUEL UST'S
APPROXIMATE LIMITS OF UST EXCAVATION (SEE FIGURE 4 FOR DETAIL)
(1)
(10)
GROUNDWATER RECOVERY TRENCH
MW3 31.0
FORMER GASOLINE PUMP
RW2
RW1
OW1
MW1 <0.5
EXISTING FUEL DISPENSER ISLAND
STORM DRAIN CATCH BASIN
CONCRETE
FORMER GASOLINE PUMP
<0.5 MW8
CONCRETE SIDEWALK
COVERED NURSERY
FORMER 1K FUEL UST
GROUNDWATER DISCHARGE PIPING/ELECTRICAL CONDUIT
TREES
CONTROL PANEL
<0.5 MW4
500-GAL ABOVE GROUND HOLDING TANK
BUILDING
OIL WATER SEPERATOR (ABOVEGROUND)
MAINTENANCE BUILDING
AIR COMPRESSOR
<0.5 MW10
ABOVE GROUND CARBON TANKS
ASPHALT DRIVEWAY
TENNIS COURTS
8' HIGH WALL
LEGEND:
MW10 GROUNDWATER MONITORING WELL
MW9 GROUNDWATER RECOVERY WELL
OW1 GROUNDWATER OBSERVATION WELL
31.0 BENZENE CONCENTRATION IN PARTS PER BILLION (ppb), 05/20/2010
<0.5 LESS THAN LABORATORY DECTECTION LIMITS
(1) BENZENE ISO-CONCENTRATION CONTOUR IN ppb (DASHED WHERE INFERRED)
RESULT IS BETWEEN THE RL AND THE MDL; TRACE CONCENTRATION
NORTH
0 SCALE 40'
(APPROXIMATE DIMENSIONS)
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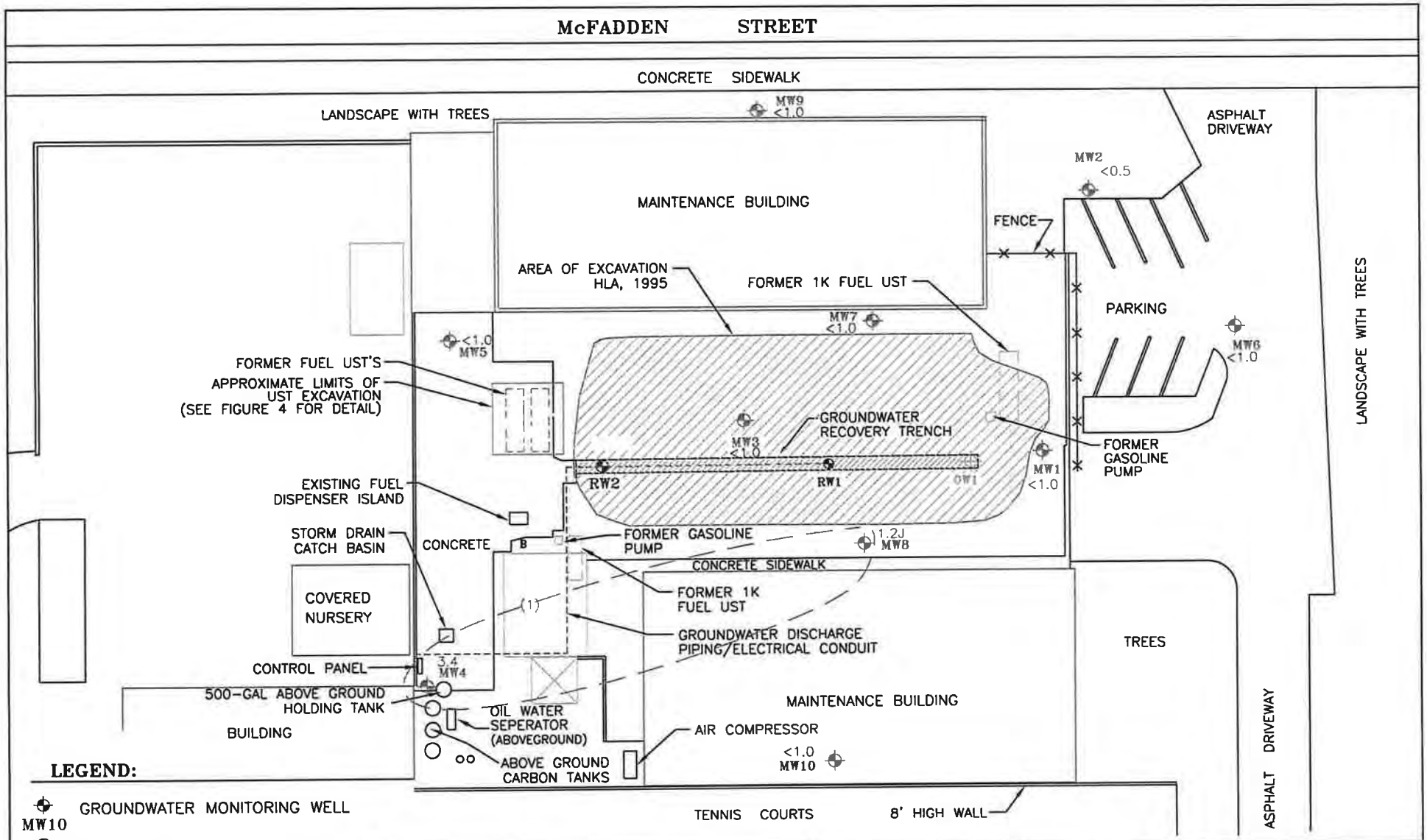
BENZENE CONCENTRATIONS IN GROUNDWATER
DRAWING NUMBER: GWC-WPASIF3
FIGURE 9


McFADDEN STREET
CONCRETE SIDEWALK
LANDSCAPE WITH TREES
MW9 <1.0
ASPHALT DRIVEWAY
MW2 <0.5
MAINTENANCE BUILDING
FENCE
AREA OF EXCAVATION HLA, 1995
FORMER 1K FUEL UST
PARKING
MW7 <1.0
<1.0 MW5
MW6 <1.0
FORMER FUEL UST'S
APPROXIMATE LIMITS OF UST EXCAVATION (SEE FIGURE 4 FOR DETAIL)
GROUNDWATER RECOVERY TRENCH
MW3 <1.0
FORMER GASOLINE PUMP
RW2
RW1
OW1
MW1 <1.0
EXISTING FUEL DISPENSER ISLAND
STORM DRAIN CATCH BASIN
CONCRETE
FORMER GASOLINE PUMP
1.2J MW8
CONCRETE SIDEWALK
COVERED NURSERY
FORMER 1K FUEL UST
GROUNDWATER DISCHARGE PIPING/ELECTRICAL CONDUIT
TREES
CONTROL PANEL
3.4 MW4
500-GAL ABOVE GROUND HOLDING TANK
OIL WATER SEPERATOR (ABOVEGROUND)
MAINTENANCE BUILDING
BUILDING
AIR COMPRESSOR
<1.0 MW10
ABOVE GROUND CARBON TANKS
TENNIS COURTS
8' HIGH WALL
ASPHALT DRIVEWAY
LANDSCAPE WITH TREES
LEGEND:
MW10 GROUNDWATER MONITORING WELL
MW9 GROUNDWATER RECOVERY WELL
OW1 GROUNDWATER OBSERVATION WELL
3.4 MTBE CONCENTRATION IN PARTS PER BILLION (ppb), 05/20/2010
<1.0 LESS THAN LABORATORY DECTECTION LIMITS
(1) MTBE ISO-CONCENTRATION CONTOUR IN ppb (DASHED WHERE INFERRED)
J RESULT IS BETWEEN THE RL AND THE MDL; TRACE CONCENTRATION
NORTH
0 SCALE 40'
(APPROXIMATE DIMENSIONS)
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Drawn By: ED DEE
Date: 02/20/2010
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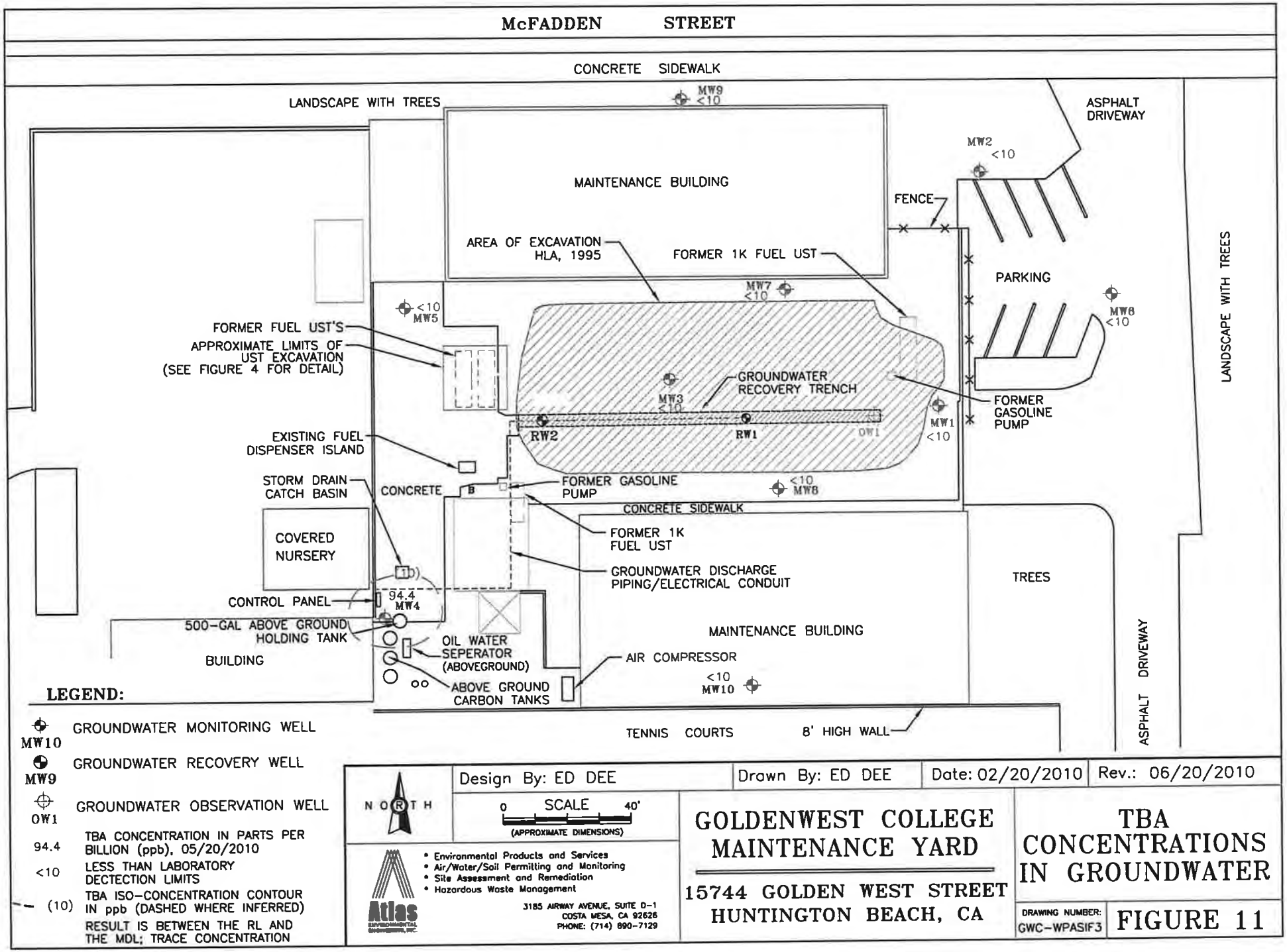
MTBE CONCENTRATIONS IN GROUNDWATER
DRAWING NUMBER: GWC-WPASIF3
FIGURE 10


McFADDEN STREET
CONCRETE SIDEWALK
LANDSCAPE WITH TREES
MW9 <10
ASPHALT DRIVEWAY
MW2 <10
MAINTENANCE BUILDING
FENCE
AREA OF EXCAVATION HLA, 1995
FORMER 1K FUEL UST
PARKING
MW7 <10
<10 MW5
MW6 <10
LANDSCAPE WITH TREES
FORMER FUEL UST'S
APPROXIMATE LIMITS OF UST EXCAVATION (SEE FIGURE 4 FOR DETAIL)
GROUNDWATER RECOVERY TRENCH
MW3 <10
FORMER GASOLINE PUMP
RW2
RW1
OW1
MW1 <10
EXISTING FUEL DISPENSER ISLAND
STORM DRAIN CATCH BASIN
CONCRETE
FORMER GASOLINE PUMP
<10 MW8
CONCRETE SIDEWALK
COVERED NURSERY
FORMER 1K FUEL UST
GROUNDWATER DISCHARGE PIPING/ELECTRICAL CONDUIT
TREES
CONTROL PANEL
94.4 MW4
500-GAL ABOVE GROUND HOLDING TANK
OIL WATER SEPERATOR (ABOVEGROUND)
MAINTENANCE BUILDING
BUILDING
AIR COMPRESSOR
<10 MW10
ABOVE GROUND CARBON TANKS
ASPHALT DRIVEWAY
TENNIS COURTS
8' HIGH WALL
LEGEND:
MW10 GROUNDWATER MONITORING WELL
MW9 GROUNDWATER RECOVERY WELL
OW1 GROUNDWATER OBSERVATION WELL
94.4 TBA CONCENTRATION IN PARTS PER BILLION (ppb), 05/20/2010
<10 LESS THAN LABORATORY DECTECTION LIMITS
(10) TBA ISO-CONCENTRATION CONTOUR IN ppb (DASHED WHERE INFERRED)
RESULT IS BETWEEN THE RL AND THE MDL; TRACE CONCENTRATION
NORTH
0 SCALE 40'
(APPROXIMATE DIMENSIONS)
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Drawn By: ED DEE
Date: 02/20/2010
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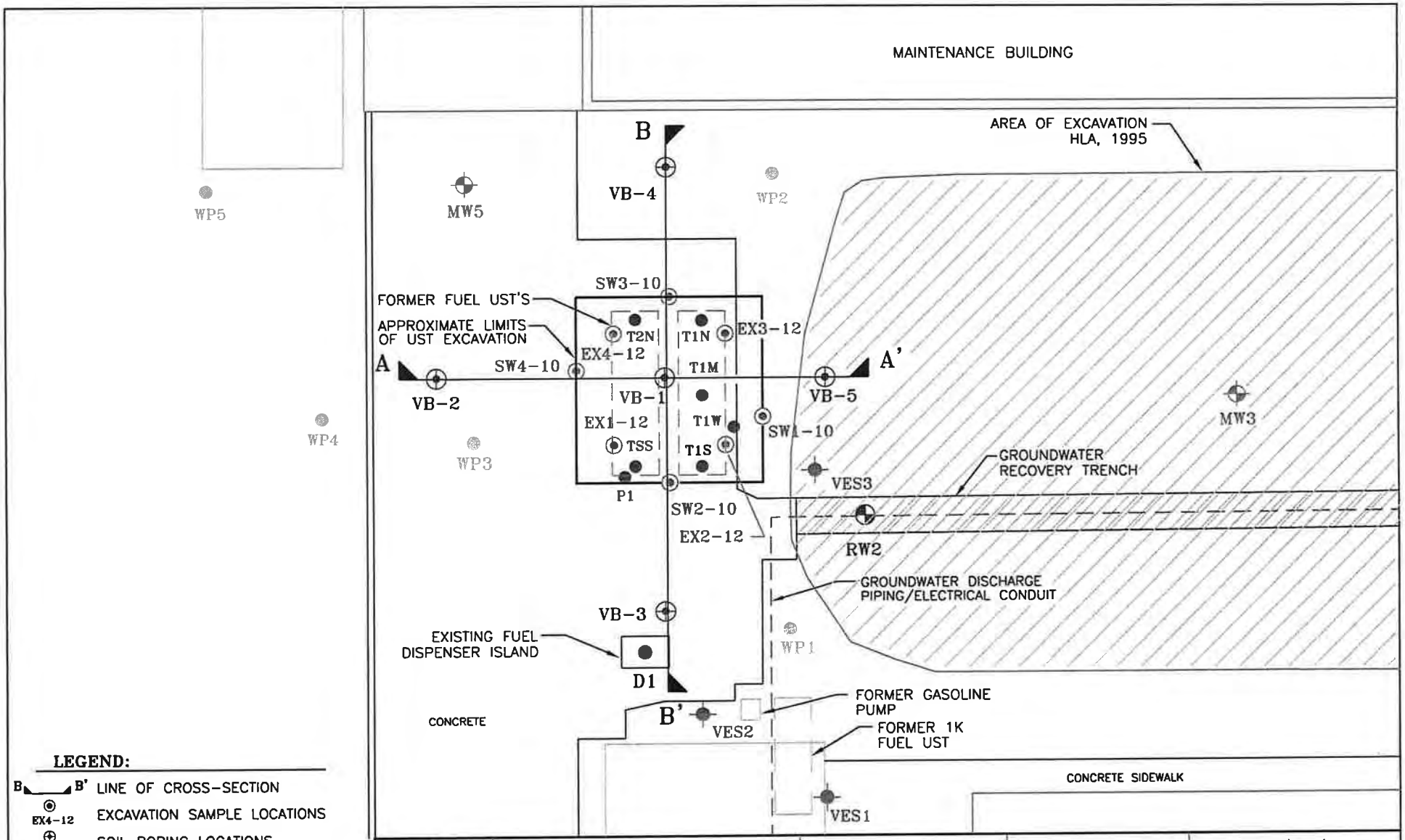
HUNTINGTON BEACH, CA
TBA CONCENTRATIONS IN GROUNDWATER
DRAWING NUMBER: GWC-WPASIF3
FIGURE 11

TABLES



LEGEND:

- B — B' LINE OF CROSS-SECTION
- EX4-12 EXCAVATION SAMPLE LOCATIONS
- VB-10 SOIL BORING LOCATIONS
- TSS UST SAMPLES, MT WALKER 2010
- MW10 GROUNDWATER MONITORING WELL
- MW9 GROUNDWATER RECOVERY WELL
- VES3 VAPOR EXTRACTION WELL
- WP4 HAND AUGER/WELL POINT

Design By: ED DEE	Drawn By: ED DEE	Date: 02/20/2010	Rev.: 06/27/2010

NORTH

SCALE 0 — 15 (APPROXIMATE DIMENSIONS)

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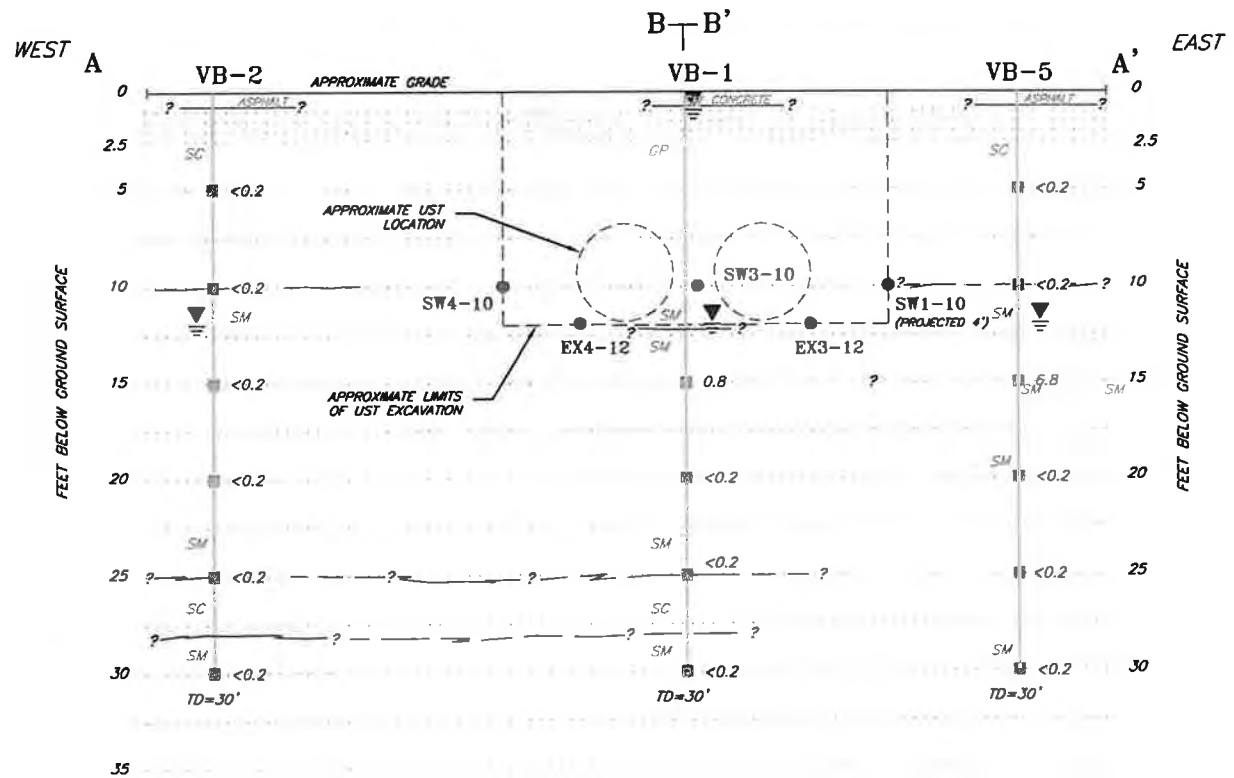
GOLDENWEST COLLEGE MAINTENANCE YARD

15744 GOLDEN WEST STREET
HUNTINGTON BEACH, CA.

CROSS-SECTION REFERENCE LINES A-A' AND B-B'

DRAWING NUMBER: GWC-WPASIF3

FIGURE 4



LEGEND:

- VB-5 — DIRECT PUSH SOIL BORING
- CONCRETE
- SC — SOIL TYPE
- SOIL SAMPLE LOCATION
- TD=30' — TOTAL DEPTH IN FEET BGS
- GROUNDWATER LEVEL DURING DRILLING 12' bgs
- 0.8 — TPHg CONCENTRATIONS, mg/kg(ppm)
- ND (<0.02) — NOT DETECTED

SOIL TYPES

GP	PEA GRAVEL
SC	SANDY CLAY
SM	SILTY SAND

Design By: J.P.	Drawn By: EFD	Date: 6/24/10	Rev.: 6/28/10

VERTICAL AND HORIZONTAL SCALE
0 10'
(APPROXIMATE DIMENSIONS)

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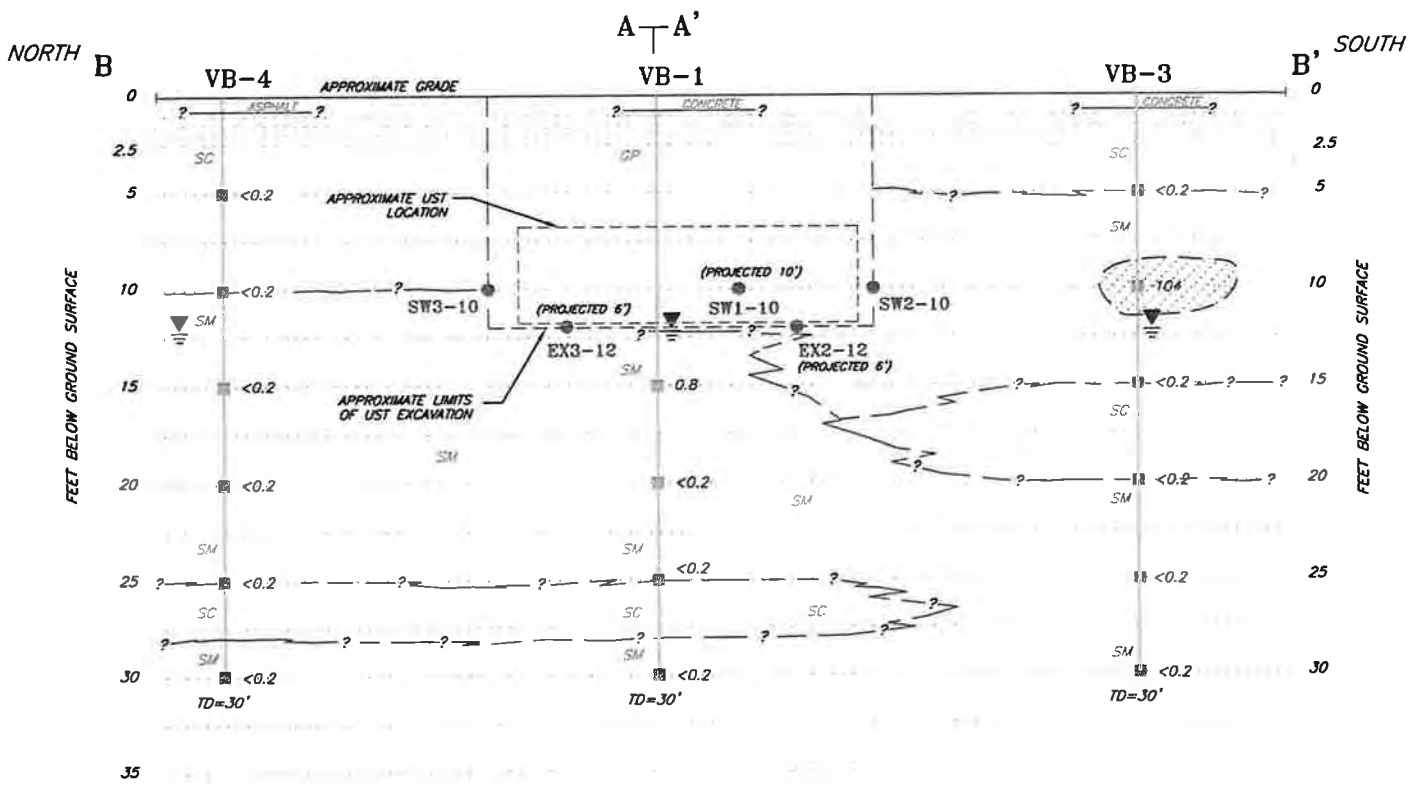
GOLDENWEST COLLEGE MAINTENANCE YARD

15744 GOLDEN WEST STREET
HUNTINGTON BEACH, CA.

CROSS SECTION REFERENCE LINE A-A' TPHg CONCENTRATIONS

DRAWING NUMBER: VEN-VB-F5

FIGURE 5



LEGEND:

- VB-4 — DIRECT PUSH SOIL BORING
- ASPHALT
- SC — SOIL TYPE
- SOIL SAMPLE LOCATION
- TD=30' — TOTAL DEPTH IN FEET BGS
- GROUNDWATER LEVEL DURING DRILLING 12' bgs
- 104 — TPHg CONCENTRATIONS, mg/kg(ppm)
- ND (<0.2) — NOT DETECTED
- TPHg CONCENTRATIONS >100 mg/kg (ESTIMATED EXTENT)
- * — RESULTS WERE OBTAINED USING A HIGHER DILUTION ANALYSIS
- NS — NOT SAMPLED

SOIL TYPES

- GP — PEA GRAVEL
- SC — SANDY CLAY
- SM — SILTY SAND

Design By: J.P.	Drawn By: EFD	Date: 6/24/10	Rev.: 6/30/10

VERTICAL AND HORIZONTAL SCALE
0 10'
(APPROXIMATE DIMENSIONS)

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GOLDENWEST COLLEGE MAINTENANCE YARD

15744 GOLDEN WEST STREET
HUNTINGTON BEACH, CA.

CROSS SECTION REFERENCE LINE B-B' TPHg CONCENTRATIONS

DRAWING NUMBER: VEN-VB-F6

FIGURE 6

TABLE 1
SOIL ANALYTICAL RESULTS
GOLDEN WEST COLLEGE
HUNTINGTON BEACH, CALIFORNIA

(Concentrations in mg/kg)

Sample ID	Date	EPA Method 8015M			EPA Method 8020 / EPA Method 8260B (after 2000)									Sample Depth (ft. bgs)	Notes
		TPH	TPHg	TPHd	Benzene	Toluene	E-Benzene	Xylene	MTBE	ETBE	DIPE	TAME	TBA		
Boring and Well Installation 1988 through 1994															
B-01-94	08/08/94	<1.0	-	-	<0.00050	<0.0050	<0.0050	<0.015	-	-	-	-	-	5	
	08/08/94	4.1	-	-	<0.0050	<0.0050	0.12	<0.015	-	-	-	-	-	10	
B-02-94	08/08/94	1.2	-	-	0.04	<0.0050	0.01	0.08	-	-	-	-	-	5	
	08/08/94	<1.0	-	-	<0.0050	<0.0050	<0.0050	0.015	-	-	-	-	-	10	
MW-1	05/25/88	<10.0	-	-	NA	NA	NA	NA	-	-	-	-	-	5	
	05/25/88	508	-	-	0.01	0.11	0.04	0.22	-	-	-	-	-	10	
MW-2	05/25/88	<10.0	-	-	NA	NA	NA	NA	-	-	-	-	-	10	
	05/25/88	<10.0	-	-	0.03	0.01	0.002	0.01	-	-	-	-	-	15	
MW-3	05/24/88	<10.0	-	-	NA	NA	NA	NA	-	-	-	-	-	5	
	05/24/88	<10.0	-	-	NA	NA	NA	NA	-	-	-	-	-	10	
MW-4	01/16/89	<0.05	-	-	NA	NA	NA	NA	-	-	-	-	-	5	
	01/16/89	<0.05	-	-	<0.001	<0.001	<0.001	<0.001	-	-	-	-	-	10	
MW-5	01/16/89	<0.05	-	-	NA	NA	NA	NA	-	-	-	-	-	8	
	01/16/89	<0.05	-	-	<0.001	<0.001	<0.001	<0.001	-	-	-	-	-	10	
MW-6	01/16/89	<0.05	-	-	<0.001	<0.001	<0.001	<0.001	-	-	-	-	-	5	
MW-7	04/11/90	<5.0	-	-	0.45	0.49	0.12	0.42	-	-	-	-	-	5	
	04/11/90	47	-	-	0.73	9.3	4.2	12	-	-	-	-	-	10	
MW-8	04/11/90	<5.0	-	-	0.75	0.77	0.16	0.74	-	-	-	-	-	5	
	04/11/90	1,600	-	-	12.0	23.0	14.0	35.0	-	-	-	-	-	10	
MW-9	04/11/90	<5.0	-	-	<0.005	<0.005	<0.005	0.01	-	-	-	-	-	10	
MW-10	05/03/90	<5.0	-	-	<0.005	<0.005	<0.005	<0.005	-	-	-	-	-	10	
VES-1	04/11/90	<5.0	-	-	0.02	0.1	0.02	0.23	-	-	-	-	-	5	
	04/11/90	40	-	-	1.3	6.2	1.7	4.4	-	-	-	-	-	10	
VES-2	04/11/90	<5.0	-	-	0.16	0.12	0.01	0.16	-	-	-	-	-	10	
VES-3	04/11/90	<5.0	-	-	0.25	0.38	0.05	0.2	-	-	-	-	-	5	
	04/11/90	930	-	-	1.70	2.6	0.67	1.60	-	-	-	-	-	10	
Excavavation Sidewall and Bottom Samples 1995															
B-1	08/07/95	<1.0	-	-	<0.005	<0.005	<0.005	<0.005	-	-	-	-	-	23	W/Center
B-2	08/07/95	2.2	-	-	0.015	<0.005	0.053	0.008	-	-	-	-	-	14	W/Center
B-3	08/07/95	120	-	-	<0.005	0.022	0.48	0.042	-	-	-	-	-	14	SW/Center
B-4	08/07/95	5.5	-	-	0.051	0.04	0.071	0.52	-	-	-	-	-	14	S/Center
B-5	08/07/95	3.8	-	-	<0.005	<0.005	0.04	0.012	-	-	-	-	-	14	Center
B-6	08/08/95	4.4	-	-	0.31	0.008	0.14	0.025	-	-	-	-	-	14	S/Center
B-7	08/08/95	33	-	-	0.18	0.3	0.34	0.52	-	-	-	-	-	14	S/E
B-8	08/08/95	1,300	-	-	12	37	21	98	-	-	-	-	-	14	E/Center
B-9	08/10/95	<1.0	-	-	<0.005	<0.005	<0.005	<0.005	-	-	-	-	-	14	NW Corner
B-10	08/10/95	<1.0	-	-	<0.005	<0.005	<0.005	<0.005	-	-	-	-	-	14	N/Center
B-11	08/10/95	<1.0	-	-	0.013	<0.005	<0.005	<0.005	-	-	-	-	-	14	N/Center
B-12	08/10/95	<1.0	-	-	<0.005	<0.005	<0.005	<0.005	-	-	-	-	-	14	N/Center

TABLE 1
SOIL ANALYTICAL RESULTS
GOLDEN WEST COLLEGE
HUNTINGTON BEACH, CALIFORNIA

(Concentrations in mg/kg)

		EPA Method 8015M			EPA Method 8020 / EPA Method 8260B (after 2000)									Sample Depth	Notes
Sample ID	Date	TPH	TPHg	TPHd	Benzene	Toluene	E-Benzene	Xylene	MTBE	ETBE	DIPE	TAME	TBA	(ft. bgs)	
B-14	08/14/95	1,000	-	-	1.8	1.8	24	46	-	-	-	-	-	14	S/E
B-15	08/17/95	260	-	-	2.9	0.87	2.5	9.7	-	-	-	-	-	16	NE Corner
B-16	08/17/95	74	-	-	0.84	0.47	1.5	6	-	-	-	-	-	16	NE Corner
W-1	08/07/95	1.8	-	-	<0.005	<0.005	0.026	0.055	-	-	-	-	-	6	S/Center
W-2	08/07/95	5.5	-	-	0.006	<0.005	0.036	<0.005	-	-	-	-	-	6	S/W
W-3	08/07/95	4.1	-	-	0.29	<0.005	0.3	<0.005	-	-	-	-	-	9	S/Center
W-4	08/07/95	2.5	-	-	0.009	<0.005	0.19	<0.005	-	-	-	-	-	6	S/Center
W-5	08/08/95	<1.0	-	-	<0.005	<0.005	<0.005	<0.005	-	-	-	-	-	6	S/Center
W-6	08/08/95	47	-	-	2	0.008	1.9	0.23	-	-	-	-	-	9.5	S/Center
W-7	08/08/95	1.3	-	-	0.021	0.044	0.016	0.054	-	-	-	-	-	9	SE Corner Excavated
W-8	08/08/95	<1.0	-	-	<0.005	0.007	0.007	0.023	-	-	-	-	-	7	SE Corner Excavated
W-9	08/08/95	<1.0	-	-	0.021	<0.005	0.013	0.046	-	-	-	-	-	6	E/Center Excavated
W-10	08/08/95	940	-	-	2.8	31	14	77	-	-	-	-	-	9	E/Center Excavated
W-11	08/08/95	4.5	-	-	0.066	<0.005	0.21	0.15	-	-	-	-	-	6	SE Corner Excavated
W-12	08/09/95	1.3	-	-	<0.005	<0.005	0.013	0.01	-	-	-	-	-	5	SW Corner
W-13	08/09/95	1.7	-	-	0.028	<0.005	0.054	0.054	-	-	-	-	-	6	W/Center
W-14	08/10/95	<1.0	-	-	<0.005	<0.005	<0.005	<0.005	-	-	-	-	-	5	SW Corner
W-15	08/10/95	<1.0	-	-	<0.005	<0.005	<0.005	<0.005	-	-	-	-	-	8	SW Corner
W-16	08/10/95	<1.0	-	-	<0.005	<0.005	<0.005	<0.005	-	-	-	-	-	3	W/Center
W-17	08/10/95	2	-	-	<0.005	<0.005	<0.005	0.008	-	-	-	-	-	3	NW Corner
W-18	08/10/95	1.4	-	-	<0.005	<0.005	0.04	0.009	-	-	-	-	-	6	NW Corner
W-19	08/10/95	180	-	-	<0.025	0.29	1.1	1.7	-	-	-	-	-	10	NW Corner
W-20	08/10/95	1.4	-	-	0.098	0.033	0.013	0.15	-	-	-	-	-	5	N/Center
W-21	08/10/95	20	-	-	0.074	0.039	0.12	0.08	-	-	-	-	-	10	N/Center
W-22	08/10/95	1,900	-	-	4.9	3.2	23	44	-	-	-	-	-	10	N/Center
W-23	08/10/95	1.6	-	-	0.029	<0.005	0.044	0.019	-	-	-	-	-	5	N/Center
W-24	08/11/95	<1.0	-	-	<0.005	<0.005	<0.005	<0.005	-	-	-	-	-	4	NW Corner
W-25	08/11/95	2.8	-	-	0.022	<0.005	0.025	0.059	-	-	-	-	-	5	NW Corner
W-26	08/11/95	3.1	-	-	0.063	<0.005	0.14	0.026	-	-	-	-	-	5	N/Center
W-27	08/14/95	<1.0	-	-	<0.005	<0.005	<0.005	<0.005	-	-	-	-	-	5	NE Corner
W-28	08/14/95	<1.0	-	-	0.006	<0.005	0.01	0.016	-	-	-	-	-	5	NE Corner Excavated
W-29	08/14/95	<1.0	-	-	<0.005	<0.005	0.009	0.042	-	-	-	-	-	6	E/Center Excavated
W-30	08/14/95	<1.0	-	-	<0.005	<0.005	0.01	0.039	-	-	-	-	-	6	SE Corner
W-31	08/14/95	510	-	-	2.4	19	8.2	44	-	-	-	-	-	10	NE Corner

TABLE 1
SOIL ANALYTICAL RESULTS
GOLDEN WEST COLLEGE
HUNTINGTON BEACH, CALIFORNIA

(Concentrations in mg/kg)

Sample ID	Date	EPA Method 8015M			EPA Method 8020 / EPA Method 8260B (after 2000)									Sample Depth (ft. bgs)	Notes
		TPH	TPHg	TPHd	Benzene	Toluene	E-Benzene	Xylene	MTBE	ETBE	DIPE	TAME	TBA		
W-32	08/14/95	30,000	-	-	70	910	320	1,700	-	-	-	-	-	10	NE Corner Excavated
W-33	08/14/95	18	-	-	0.65	0.055	2.2	0.059	-	-	-	-	-	10	E/Center Excavated
W-34	08/14/95	260	-	-	0.79	0.26	7.5	6.9	-	-	-	-	-	10	SE Corner
W-35	08/17/95	36,000	-	-	110	490	590	1,100	-	-	-	-	-	10	NE Corner
W-36	08/17/95	180	-	-	0.16	0.037	1	2.4	-	-	-	-	-	6	NE Corner
W-37	08/17/95	1.4	-	-	<0.005	0.027	0.02	0.15	-	-	-	-	-	6	E/Center
W-38	08/17/95	310	-	-	0.025	0.046	0.037	1.2	-	-	-	-	-	10	E/Center
W-39	08/17/95	<1.0	-	-	<0.005	<0.005	0.02	0.07	-	-	-	-	-	7	E/Center
UST, Fuel Dispenser and Associated Product Line Samples - 2010															
T1-S	1/7/2010	-	**2.0**	<1	<0.001	<0.001	**0.017**	**0.076**	<0.002	<0.002	<0.002	<0.002	<0.020		
T1-M	1/7/2010	-	**180**	**10**	<0.001	<0.001	**2.7**	**4.9**	<0.02	<0.02	<0.02	<0.02	<0.2		
T1-N	1/7/2010	-	**180**	**20**	<0.01	<0.01	**3.3**	**3.38**	<0.002	<0.002	<0.002	<0.002	<0.020		
T1-W	1/7/2010	-	**0.22**	<1	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.020		
T2-S	1/7/2010	-	**0.25**	<1	**0.026**	**0.042**	<0.001	**0.015**	<0.002	<0.002	<0.002	<0.002	<0.020		
T2-N	1/7/2010	-	**24**	<1	**0.011**	**0.022**	**0.48**	**0.024**	<0.002	<0.002	<0.002	<0.002	<0.020		
P1	1/7/2010	-	<0.1	<1	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.020		
D1	1/7/2010	-	<0.1	<1	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.020		
Soil Stockpile Samples from UST Removal - 2010															
SP-1	1/7/2010	-	**1,400**	**190**	<0.05	**1.5**	**38**	**155**	<0.1	<0.1	<0.1	<0.1	<0.1		
SP-2	1/7/2010	-	<0.1	<1	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.020		
SP-3	1/7/2010	-	<0.1	<1	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.020		
Limited Excavation Confirmation Samples - 2010															
EX1-12	4/27/2010	-	**1.0**	**12.9**	<0.001	<0.001	**0.005**	<0.002	**0.033**	<0.002	<0.002	<0.002	<0.020	12	
EX2-12	4/27/2010	-	**0.9**	<5	<0.001	<0.001	<0.001	**0.031**	<0.002	<0.002	<0.002	<0.002	<0.020	12	
SW1-10	4/27/2010	-	<0.2	<5	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.020	10	
SW2-12	4/27/2010	-	<0.2	<5	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.020	12	
EX3-12	4/27/2010	-	<0.2	<5	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.020	12	
EX4-12	4/27/2010	-	<0.2	<5	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.020	12	
SW3-10	4/27/2010	-	**83.4**	**6.5J**	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.020	10	
SW4-10	4/27/2010	-	<0.2	<5	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.020	10	
Additional Site Investigation - 2010															
VB1-15	5/25/2010	-	**0.8**	<5	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.020	15	
VB1-20	5/25/2010	-	<0.2	<5	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.020	20	
VB1-25	5/25/2010	-	<0.2	<5	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.020	25	
VB1-30	5/25/2010	-	<0.2	<5	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.020	30	
VB2-5	5/25/2010	-	<0.2	<5	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.020	5	
VB2-10	5/25/2010	-	<0.2	<5	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.020	10	
VB2-15	5/25/2010	-	<0.2	<5	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.020	15	

TABLE 1
SOIL ANALYTICAL RESULTS
GOLDEN WEST COLLEGE
HUNTINGTON BEACH, CALIFORNIA

(Concentrations in mg/kg)

		EPA Method 8015M			EPA Method 8020 / EPA Method 8260B (after 2000)									Sample Depth	Notes
Sample ID	Date	TPH	TPHg	TPHd	Benzene	Toluene	E-Benzene	Xylene	MTBE	ETBE	DIPE	TAME	TBA	(ft. bgs)	
VB2-20	5/25/2010	-	<0.2	<5	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.020	20	
VB2-25	5/25/2010	-	<0.2	<5	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.020	25	
VB2-30	5/25/2010	-	<0.2	<5	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.020	30	
VB3-5	5/25/2010	-	<0.2	<5	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.020	5	
VB3-10	5/25/2010	-	**104**	**9.6J**	**0.682**	<0.001	**2.46**	<0.002	**0.425J**	<0.002	<0.002	<0.002	<0.020	10	
VB3-15	5/25/2010	-	<0.2	<5	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	**0.184**	15	
VB3-20	5/25/2010	-	<0.2	<5	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.020	20	
VB3-25	5/25/2010	-	<0.2	<5	<0.001	<0.001	<0.001	<0.002	**0.002J**	<0.002	<0.002	<0.002	<0.020	25	
VB3-30	5/25/2010	-	<0.2	<5	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.020	30	
VB4-5	5/25/2010	-	<0.2	<5	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.020	5	
VB4-10	5/25/2010	-	<0.2	<5	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.020	10	
VB4-15	5/25/2010	-	<0.2	<5	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.020	15	
VB4-20	5/25/2010	-	<0.2	<5	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.020	20	
VB4-25	5/25/2010	-	<0.2	<5	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.020	25	
VB4-30	5/25/2010	-	<0.2	<5	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.020	30	
VB5-5	5/25/2010	-	<0.2	<5	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.020	5	
VB5-10	5/25/2010	-	<0.2	<5	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.020	10	
VB5-15	5/25/2010	-	**6.8**	<5	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.020	15	
VB5-20	5/25/2010	-	<0.2	<5	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.020	20	
VB5-25	5/25/2010	-	<0.2	<5	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.020	25	
VB5-30	5/25/2010	-	<0.2	<5	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.020	30	

Notes: **Soil Analytical Results from 1988 through 1995 were adapted from previous consultants' summary tables. Soil Stock Pile Analtytical Results from the Excavation in 1995 are not included in this table.**

< - Less than laboratory detection limit stated
\- - Not Analyzed
* - Obtained from a higher dilution analysis
mg/kg - milligrams per kilogram, ppm
TPHd - Total Petroleum Hydrocarbons, diesel
TPHg - Total Petroleum Hydrocarbons, gasoline

MTBE - Methyl tert-Butyl Ether
TBA - tert-Butyl Alcohol
ETBE - Ethyl tert-butyl ether
DIPE - Diisopropyl Ether
TAME - tert-Amyl Methyl ether

Highlighted areas were collected under OCHCA supervision during excavation in 1995.

TABLE 2
ADDITIONAL SOIL ANALYTICAL RESULTS
GOLDEN WEST COLLEGE
HUNTINGTON BEACH, CALIFORNIA

(Concentrations in mg/kg)

Sample ID	Date	EPA Method 8260B									
		1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene	p-Isopropyltoluene	Sec-Butylbenzene	n-Butylbenzene	Naphthalene	Isopropylbenzene	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	n-Propylbenzene
UST, Fuel Dispenser and Associated Product Line Samples											
T1-S	1/7/2010	0.014	0.054	<0.005	<0.005	<0.005	0.068	<0.005	<0.005	<0.005	<0.005
T1-M	1/7/2010	1.3	2.5	<0.05	<0.005	1.8	1.3	<0.05	<0.005	<0.005	2.2
T1-N	1/7/2010	1.6	6.0	0.030	<0.005	0.15	0.016	0.19	<0.005	<0.005	0.4
T1-W	1/7/2010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
T2-S	1/7/2010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
T2-N	1/7/2010	<0.005	<0.005	<0.005	<0.005	0.090	0.17	0.16	<0.005	<0.005	0.49
P1	1/7/2010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
D1	1/7/2010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Soil Stockpile Samples											
SP-1	1/7/2010	36	110	2.8		19	14	2.3	<0.005	<0.005	20
SP-2	1/7/2010	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
SP-3	1/7/2010	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Limited Excavation Confirmation Samples - 2010											
EX1-12	4/27/2010	<0.002	<0.002	<0.002	0.003J	0.003J	0.005	0.003J	<0.002	<0.002	0.005
EX2-12	4/27/2010	0.021	0.028	<0.002	<0.002	0.005	<0.002	<0.002	<0.002	<0.002	0.025
SW1-10	4/27/2010	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
SW2-12	4/27/2010	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
EX3-12	4/27/2010	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
EX4-12	4/27/2010	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
SW3-10	4/27/2010	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
SW4-10	4/27/2010	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Additional Site Investigation - 2010											
VB1-15	5/25/2010	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
VB1-20	5/25/2010	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
VB1-25	5/25/2010	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
VB1-30	5/25/2010	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
VB2-5	5/25/2010	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
VB2-10	5/25/2010	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
VB2-15	5/25/2010	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
VB2-20	5/25/2010	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
VB2-25	5/25/2010	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
VB2-30	5/25/2010	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
VB3-5	5/25/2010	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
VB3-10	5/25/2010	0.448	1.54	<0.002	0.293	0.509	2.60	0.669	<0.002	<0.002	2.15
VB3-15	5/25/2010	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
VB3-20	5/25/2010	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
VB3-25	5/25/2010	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
VB3-30	5/25/2010	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
VB4-5	5/25/2010	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
VB4-10	5/25/2010	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
VB4-15	5/25/2010	<0.002	<0.002	<0.002	<0.002	<0.002	6.5	<0.002	6.2	4.8J	<0.002
VB4-20	5/25/2010	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
VB4-25	5/25/2010	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
VB4-30	5/25/2010	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
VB5-5	5/25/2010	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
VB5-10	5/25/2010	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
VB5-15	5/25/2010	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
VB5-20	5/25/2010	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
VB5-25	5/25/2010	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
VB5-30	5/25/2010	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Notes:
< - Less than laboratory detection limit stated
- - Not Analyzed
* - Obtained from a higher dilution analysis
mg/kg - milligrams per kilogram, ppm

TABLE 3
HYDROPUNCH GROUNDWATER ANALYTICAL RESULTS
GOLDEN WEST COLLEGE
HUNTINGTON BEACH, CALIFORNIA

(Concentrations in ug/L or ppb)

		EPA Method 8015M		EPA Method 8260B								
Sample ID	Date	TPHg	TPHd	Benzene	Toluene	E-Benzene	Xylene	MTBE	ETBE	DIPE	TAME	TBA
VB1	5/25/2010	94J	<500	<0.5	<0.5	10.0	<1	<1	<1	1.1J	<1	<10

		EPA Method 8260B										
Sample ID	Date	Isopropylbenzene	n-Propylbenzene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene	n-Butylbenzene	Naphthalene					
VB1	5/25/2010	2.1J	6.3	2.4J	12.1	1.6J	2.2J					

Notes:

Soil Analytical Results from 1988 through 1995 were adapted from previous consultants summary tables. Soil Stock Pile Analtytical Results from the Excavation in 1995 are not included in this table.

< - Less than laboratory detection limit stated
\- - Not Analyzed
* - Obtained from a higher dilution analysis
ug/L - micrograms per Liter, ppb
J - Trace concentration, result is between DF X MDL & DF X PQL

TPHd - Total Petroleum Hydrocarbons, diesel
TPHg - Total Petroleum Hydrocarbons, gasoline
MTBE - Methyl tert-Butyl Ether
TBA - tert-Butyl Alcohol
ETBE - Ethyl tert-butyl ether
TAME - tert-Amyl Methyl ether

TABLE 4 - HISTORICAL GROUNDWATER MONITORING DATA

GOLDEN WEST COLLEGE

HUNTINGTON BEACH, CA

(Concentration, μ g/L)

Well	Date	SWE	DTW	PT	E-WATER	TPHg	Benzene	Toluene	E-Benzene	Xylenes	MTBE	MTBE (8260)	ETBE	DIPE	TAME	TBA
MW-1	5/20/2010	24.75	8.59	0.00	16.16	<50	<0.5	<0.5	<0.5	<1	--	<1	<1	<1	<1	<10
MW-2	5/20/2010	24.97	8.56	0.00	16.41	<50	<0.5	<0.5	<0.5	<1	--	<1	<1	<1	<1	<10
MW-3	5/20/2010	24.25	7.50	0.00	16.75	340	31.0	<0.5	0.6J	<1	--	<1	<1	<1	<1	<10
MW-4	5/20/2010	24.01	8.80	0.00	15.21	<50	<0.5	<0.5	<0.5	<1	--	3.4	<1	<1	<1	94.4
MW-5	5/20/2010	24.21	8.45	0.00	15.76	<50	<0.5	<0.5	<0.5	<1	--	<1	<1	<1	<1	<10
MW-6	5/20/2010	26.47	8.25	0.00	18.22	<50	<0.5	<0.5	<0.5	<1	--	<1	<1	<1	<1	<10
MW-7	5/20/2010	24.46	8.52	0.00	15.94	<50	<0.5	<0.5	<0.5	<1	--	<1	<1	<1	<1	<10
MW-8	5/20/2010	24.60	8.70	0.00	15.90	64.J	<0.5	<0.5	<0.5	<1	--	1.2J	<1	<1	<1	<10
MW-9	5/20/2010	23.83	7.70	0.00	16.13	<50	<0.5	<0.5	<0.5	<1	--	<1	<1	<1	<1	<10
MW-10	5/20/2010	25.53	9.75	0.00	15.78	<50	<0.5	<0.5	<0.5	<1	--	<1	<1	<1	<1	<10

SWE - Surveyed Well Elevation

DTW - Depth To Water

PT - Product Thickness (apparent)

E-Water - Groundwater elevation

-- - Not analyzed

μ g/L - Micrograms per Liter

TPHg - Total Petroleum Hydrocarbons (gasoline), EPA 8015M

TPHd - Total Petroleum Hydrocarbons (diesel), EPA 8015M

MTBE - Methyl tert-Butyl ether

< - Less than laboratory detection limits

NA - Not Available

TAME - tert-Amyl Methyl ether

DIPE - Di-isopropyl ether

ETBE - Ethyl tert-Butyl ether

LPH - Liquid-Phase Hydrocarbons

* - Suspected Gauging Error

† - Duplicate sample

‡ - Groundwater Sampled on Alternate Days

** - Obtained from Higher Dilution

L - Larger Sample volume is used to achieve Lower Detection Limits

S - TPHg result was 14,700 ppb; chromatogram does not match that of the TPHg standard.

J - Result is between the RL and the MDL; trace concentration

TABLE 5
ADDITIONAL GROUNDWATER ANALYTICAL RESULTS
GOLDEN WEST COLLEGE
HUNTINGTON BEACH, CALIFORNIA

(Concentrations in ug/L or ppb)

		EPA Method 8260B							
Sample ID	Date	Isopropylbenzene	n-Propylbenzene	Sec-Butylbenzene	n-Butylbenzene	Naphthalene	cis-1,2-Dichloroehtene		
MW-1	5/20/2010	**7.5**	**12.0**	<1.0	<1.0	<1.0	<1.0		
MW-2	5/20/2010	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		
MW-3	5/20/2010	**9.6**	**12.2**	**1.3J**	**1.1J**	<1.0	**10.0**		
MW-4	5/20/2010	<1.0	<1.0	<1.0	<1.0	**6.3**	<1.0		
MW-5	5/20/2010	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		
MW-6	5/20/2010	<1.0	<1.0	<1.0	<1.0	<1.0	**1.5J**		
MW-7	5/20/2010	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		
MW-8	5/20/2010	**0.8J**	**1.0J**	<1.0	<1.0	**1.1J**	<1.0		
MW-9	5/20/2010	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		
MW-10	5/20/2010	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		

NOTES:

< - Less than laboratory detection limit stated
\- - Not Analyzed
* - Obtained from a higher dilution analysis
ug/L - micrograms per Liter, ppb
J - Trace concentration, result is between DF X MDL & DF X PQL

TPHd - Total Petroleum Hydrocarbons, diesel
TPHg - Total Petroleum Hydrocarbons, gasoline
MTBE - Methyl tert-Butyl Ether
TBA - tert-Butyl Alcohol
ETBE - Ethyl tert-butyl ether
TAME - tert-Amyl Methyl ether

APPENDIX A

COUNTY OF ORANGE
HEALTH CARE AGENCY

PUBLIC HEALTH SERVICES
ENVIRONMENTAL HEALTH

DAVID L. RILEY
DIRECTOR

DAVID M. SOULELES, MPH
DEPUTY AGENCY DIRECTOR

RICHARD SANCHEZ, REHS, MPH
DIRECTOR
ENVIRONMENTAL HEALTH

MAILING ADDRESS:
1241 E. DYER ROAD
SUITE 120
SANTA ANA, CA 92705-5611

TELEPHONE: (714) 433-6000
FAX: (714) 754-1732
E-MAIL: ehealth@ochca.com

Excellence
Integrity
Service

March 26, 2010

Jerry Marchbank
Coast Community College District
1370 Adams Avenue
Costa Mesa, CA 92626

Subject: **Limited Excavation and Site Investigation Work Plan dated March 16, 2010**

Re: Goldenwest College
15744 Goldenwest Street
Huntington Beach, CA 92647
OCHCA Case #10UT004

Dear Mr. Marchbank:

The Orange County Local Oversight Program (OCLOP) has reviewed the subject work plan. Based on the data provided for review in the subject report the proposed work activities are approved with the following conditions:

1. Groundwater samples must be collected from the entire existing monitoring well network. These wells must be sampled according to the same procedures outlines for the sampling of wells MW-4, MW-5, MW-6, and MW-9.

2. Soil data is only used as a vapor screening tool in the absence of vapor data. If the intent of proposed soil boring B6 is to evaluate the risk from vapor intrusion to the nearby commercial development, as indicated in the subject work plan, this should be accomplished by collecting soil vapor data. Please submit a separate work plan for the collection of soil vapor samples to evaluate potential risk to the offsite commercial development as well as any onsite buildings that are not slated for automotive use. Please refer to the DTSC's *Interim Final - Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air* dated December 15, 2004 (Revised February 7, 2005) in preparation of your work plan.

3. Work activities must be completed within 60 days of receipt of this letter. If access agreements cause any significant delays that may jeopardize this deadline please contact the OCLOP as soon as possible.

4. The report documenting the results of the assessment must be submitted within 45 days of completion of field activities.

5. The OCLOP must be notified a minimum of 48-hours prior to conducting field activities.

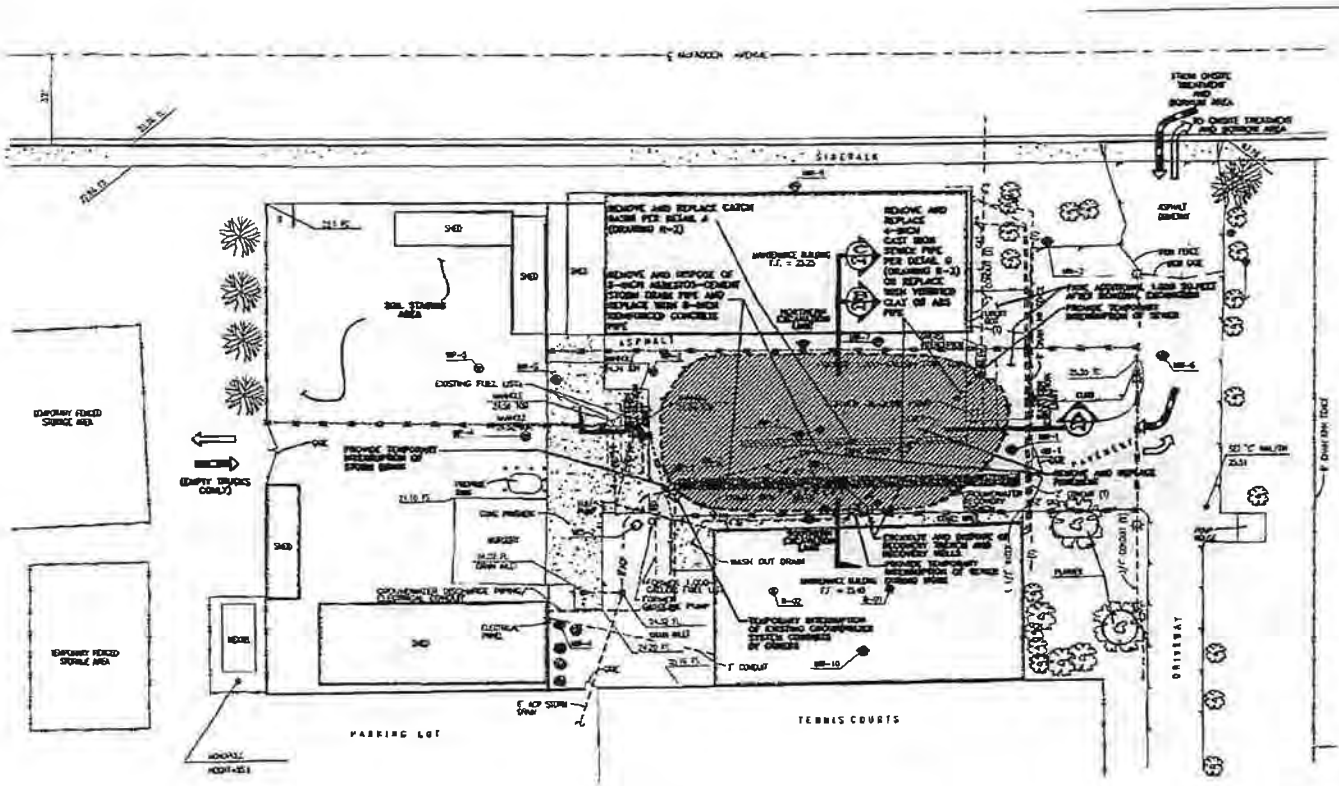
If you have any questions, please contact me at (714) 433-6263.

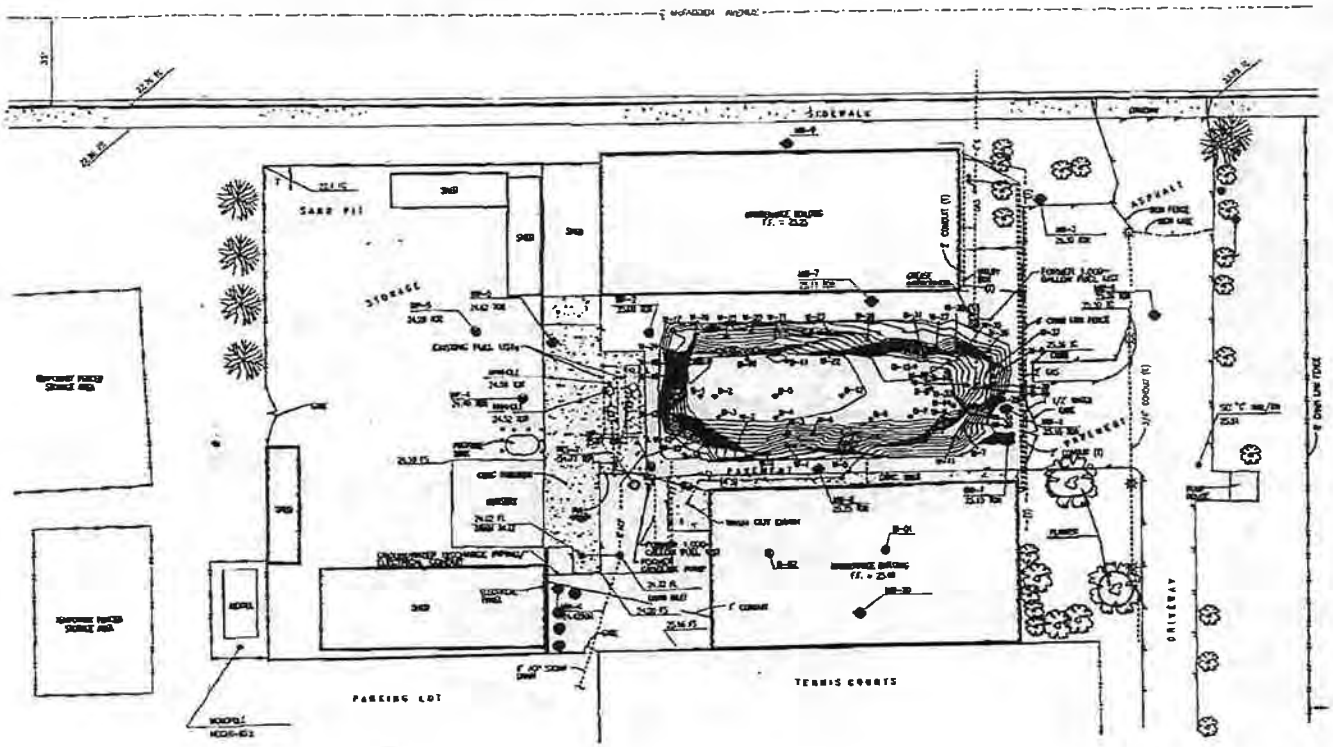
Sincerely,

Geniece Higgins
Hazardous Waste Specialist
Hazardous Materials Mitigation Section
Environmental Health

cc: Ken Williams, Santa Ana Regional Water Quality Control Board
Jasmine Senn, Atlas Environmental Engineering, Inc.

APPENDIX B


SIDEWALK
SHED
TEMPORARY FENCED STORAGE AREA
TEMPORARY FENCED STORAGE AREA
(EMPTY TRUCKS ONLY)
PARKING LOT
TENNIS COURTS
DRIVEWAY
ASPHALT
EXISTING FUEL USTs
TEMPORARY RELOCATION OF EXISTING GROUNDWATER EXTRACTION WELL
REMOVE AND REPLACE CATCH BASIN PER DETAIL A (DRAWING R-2)
REMOVE AND REPLACE 6-INCH CAST IRON SEWER PIPE PER DETAIL B (DRAWING R-2) OR REPLACE WITH VITRIFIED CLAY OR ABS PIPE
REMOVE AND DISPOSE OF 8-INCH ASBESTOS-CEMENT STORM DRAIN PIPE AND REPLACE WITH 8-INCH REINFORCED CONCRETE PIPE
PROVIDE TEMPORARY INTERRUPTION OF SEWER
PROVIDE TEMPORARY INTERRUPTION OF STORM DRAIN
SOIL STORAGE AREA
MAINTENANCE BUILDING T.I. = 23.25
MONITORING WELL UNIT
WASH OUT DRAIN
GROUNDWATER EXTRACTION WELL
TEMPORARY RELOCATION OF EXISTING GROUNDWATER EXTRACTION WELL DURING REMOVAL OF TENNIS COURTS BY OTHERS
CHAIN LINK FENCE
WOOD FENCE
6' CONDUIT
6" CONDUIT
6" DRAIN
6" DRAIN
6" DRAIN



EXPLANATION

B-1 APPROXIMATE LOCATION OF SOIL SAMPLE COLLECTED FROM EXCAVATION SIDEWALL	CROSSWATER MONITORING WELL	CHAIN LINK FENCE
B-1 APPROXIMATE LOCATION OF SOIL SAMPLE COLLECTED FROM EXCAVATION BOTTOM	WATER EXTRACTION WELL	LANDSCAPE TREE
A LOCATION UNDERWRITE FURTHER EXCAVATION AFTER SAMPLE COLLECTION	RECOVERY WELL	EUCALYPTUS TREE
	MANGAUGER/WELL POINT	CENTER LINE
	BORING	TELEPHONE CONDUIT
	CROSSWATER TREATMENT TANKS	ELECTRICAL CONDUIT
	EDGE OF PAVEMENT	ELECTRICAL AND FUEL CONDUIT
	PARKING LOT LIGHT	GAS LINE
	POWER POLE	SEWER LINE
	POWER POLE W/ GUY	STORM DRAIN
	GAS VALVE	TOP OF RIM
	MONOPOLE	TOP OF CURB
	DRAIN	FINISH SURFACE
		FINISH FLOOR
		ASBESTOS CEMENT PIPE

SCALE IN FEET: 20 0 20 40

REFERENCE

DRAWING BASED ON SITE PLAN BY CALVIDA SURVEYING DATED MARCH 30, 1995

DATE OF SURVEY

MARCH 28, 1995

BENCH MARK

THE ELEVATIONS SHOWN HEREON ARE BASED UPON THE EXISTING FINISH FLOOR SURFACE ELEVATIONS THAT ARE SHOWN ON THE 1975 CORPORATION YARD CONSTRUCTION DRAWINGS
ELEVATION = 25.25 (NORTH BUILDING)

NO.	DATE	REVISIONS	BY	CHK

DRAWN: JR
ENGINEER: [illegible]
CHECKED: [illegible]
DATE: 4/96

PROJECT NO: 31443-15
SCALE: 1" = 30'
APPROVED: [illegible]
DATE: 4/96

Harding Lawson Associates
Engineering and Environmental Services
30 CORPORATE PARK, SUITE 400
IRVINE, CALIFORNIA 92714
(714) 260-1800

Golden West College Maintenance Yard
Huntington Beach, California

EXCAVATION PLAN WITH SOIL SAMPLE LOCATIONS

REFERENCE: C-1
SHEET: 5 OF 8
REVISION NUMBER:
DATE: 2/96

Table 1
Golden West College Maintenance Yard
Selected Historical Groundwater Elevation and Free Hydrocarbon Product (FHP) Thickness

Well Number	Well Elevation (feet MSL)	Date Monitored	Depth to Groundwater (feet bgs)	Depth to Free Product (feet bgs)	FHP Thickness (feet)	Groundwater Elevation (feet MSL)
MW-01	24.75	05/25/88	9.16	No FHP	0.00	15.59
		03/28/91	12.81	9.77	3.04	11.94
		08/30/91	11.76	11.65	0.11	12.99
		02/05/93	10.61	10.61	Trace	14.14
		06/29/93	10.05	No FHP	0.00	14.70
		02/01/94	10.28	10.28	Trace	14.47
		05/02/94	9.92	No FHP	0.00	14.83
		12/22/94	10.06	No FHP	Sheen	14.69
MW-02	24.97	02/25/88	9.33	No FHP	0.00	15.64
		01/26/89	9.65	No FHP	0.00	15.32
		05/03/90	10.25	No FHP	0.00	14.72
		03/28/91	10.46	No FHP	0.00	14.51
		08/30/91	10.98	No FHP	0.00	13.99
		02/05/93	8.99	No FHP	0.00	15.98
		05/07/93	8.63	No FHP	0.00	16.34
		02/01/94	10.06	No FHP	0.00	14.91
		05/02/94	8.91	No FHP	0.00	16.06
		12/22/94	9.98	No FHP	0.00	14.99
MW-03	24.25	05/25/88	8.99	No FHP	0.00	15.26
		03/28/91	10.98	9.51	1.47	13.27
		08/30/91	11.80	11.31	0.49	12.45
		02/05/93	11.03	11.03	Film	13.22
		05/07/93	10.81	10.81	Trace	13.44
		02/01/94	10.09	No FHP	0.00	14.16
		05/02/94	10.46	No FHP	0.00	13.79
		12/22/94	9.90	No FHP	Sheen	14.35
MW-04	24.01	01/26/89	9.93	No FHP	0.00	14.08
		05/03/90	10.54	No FHP	0.00	13.47
		03/28/91	10.07	No FHP	0.00	13.94
		08/30/91	11.51	No FHP	0.00	12.50
		11/03/94	10.94	No FHP	0.00	13.07
		11/17/94	10.97	No FHP	0.00	13.04
		12/22/94	10.32	No FHP	0.00	13.69
MW-05	24.21	01/26/89	9.73	No FHP	0.00	14.48
		05/03/90	10.35	No FHP	0.00	13.86
		07/16/91	10.67	No FHP	0.00	13.54
		08/30/91	11.24	No FHP	0.00	12.97
		11/03/94	10.90	No FHP	0.00	13.31
		11/17/94	10.94	No FHP	0.00	13.27
		12/22/94	9.30	No FHP	0.00	14.91

Table 1
Golden West College Maintenance Yard
Selected Historical Groundwater Elevation and Free Hydrocarbon Product (FHP) Thickness

Well Number	Well Elevation (feet MSL)	Date Monitored	Depth to Groundwater (feet bgs)	Depth to Free Product (feet bgs)	FHP Thickness (feet)	Groundwater Elevation (feet MSL)
MW-06	24.57	01/26/89	9.24	No FHP	0.00	15.33
		05/03/90	9.81	No FHP	0.00	14.76
		03/28/91	10.08	No FHP	0.00	14.49
		08/30/91	10.68	No FHP	0.00	13.89
		02/05/93	7.32	No FHP	0.00	17.25
		05/07/93	8.13	No FHP	0.00	16.44
		02/01/94	9.41	No FHP	0.00	15.16
		05/02/94	8.41	No FHP	0.00	16.16
		12/22/94	9.32	No FHP	0.00	15.25
MW-07	24.46	05/03/90	10.20	No FHP	0.00	14.26
		03/28/91	10.09	No FHP	0.00	14.37
		08/30/91	11.23	No FHP	0.00	13.23
		02/05/93	10.02	No FHP	0.00	14.44
		05/07/93	9.61	No FHP	0.00	14.85
		02/01/94	10.17	No FHP	0.00	14.29
		05/02/94	9.54	No FHP	0.00	14.92
		12/22/94	9.94	No FHP	0.00	14.52
MW-08	24.6	07/16/91	13.20	9.91	3.29	11.40
		08/30/91	11.98	11.90	0.08	12.62
		02/05/93	11.91	11.91	Trace	12.69
		05/07/93	9.15	9.15	Trace	15.45
		02/01/94	10.45	No FHP	0.00	14.15
		05/02/94	10.86	No FHP	0.00	13.74
		12/22/94	10.22	No FHP	Sheen	14.38
MW-09	23.83	05/03/90	9.46	No FHP	0.00	14.37
		03/28/91	9.35	No FHP	0.00	14.48
		08/30/91	10.11	No FHP	0.00	13.72
		02/05/93	8.42	No FHP	0.00	15.41
		05/07/93	8.05	No FHP	0.00	15.78
		02/01/94	9.41	No FHP	0.00	14.42
		05/02/94	8.29	No FHP	0.00	15.54
		12/22/94	9.30	No FHP	0.00	14.53
MW-10	25.53	05/03/90	11.63	No FHP	0.00	13.90
		03/28/91	10.38	No FHP	0.00	15.15
		08/30/91	12.65	No FHP	0.00	12.88
		05/07/93	8.05	No FHP	0.00	17.48
		02/01/94	9.41	No FHP	0.00	16.12
		12/22/94	11.22	No FHP	0.00	14.31

Table 1
Golden West College Maintenance Yard
Selected Historical Groundwater Elevation and Free Hydrocarbon Product (FHP) Thickness

Well Number	Well Elevation (feet MSL)	Date Monitored	Depth to Groundwater (feet bgs)	Depth to Free Product (feet bgs)	FHP Thickness (feet)	Groundwater Elevation (feet MSL)
RW-01	23.6	03/28/91	9.04	No FHP	0.00	14.56
		08/21/91	11.15	10.94	0.21	12.45
		02/05/93	15.63	15.57	0.06	7.97
		05/07/93	16.32	16.32	Trace	7.28
		02/01/94	9.45	No FHP	0.00	14.15
		05/02/94	15.62	15.62	Trace	7.98
		12/22/94	9.34	No FHP	0.00	14.26
RW-02	24.48	03/28/91	9.97	No FHP	0.00	14.51
		08/21/91	11.82	No FHP	0.00	12.66
		02/05/93	14.06	14.00	0.06	10.42
		05/07/93	16.10	16.01	0.09	8.38
		02/01/94	10.33	10.33	Trace	14.15
		05/02/94	15.87	15.79	0.08	8.61
		12/22/94	10.20	No FHP	Sheen	14.28
OW-01	NA	08/21/91	12.02	11.73	0.29	NA
		07/08/94	10.77	No FHP	0.00	NA
		12/22/94	9.99	No FHP	0.00	NA

Notes:
Elevations are referenced to Mean Sea Level (MSL).
Data from 5/26/88 to 1/23/90 was collected by Applied Geosciences, Inc.
Data from 1/23/90 to 7/1/94 was collected by Frey Environmental.
Data after 7/1/94 was collected by Harding Lawson Associates.
Data collected after 8/1/91 may be influenced by groundwater pumping.

Table 2

Summary of Historical Groundwater Analytical Results (Table 1, Frey 1994)

LABORATORY RESULTS
(mg/L - groundwater)

Sample Number	Date Sampled	Petroleum Hydrocarbons[1] Gasoline	Benzene[2]	Toluene	Ethyl Benzene	Xylenes
MW1	05/25/88	180.0	2.900	11.000	5.300	31.000
MW2	05/25/88	<0.01	0.001	0.002	0.001	0.003
	01/26/89	<0.05	<0.0002	<0.0002	<0.0002	<0.0002
	05/03/90	<1.0	<0.001	<0.001	<0.001	<0.001
	01/27/92	<0.05	<0.001	0.001	<0.001	<0.002
	05/01/92	0.1	<0.001	0.001	<0.001	<0.002
	07/29/92	<0.05	<0.001	<0.001	<0.001	<0.002
	11/06/92	<0.1	<0.0003	<0.0003	<0.0003	<0.0006
	02/05/93	<0.1	<0.0003	<0.0003	<0.0003	<0.0006
	05/07/93	<0.2	<0.0003	<0.0003	<0.0003	<0.0006
	08/05/93	<0.2	<0.0003	<0.0003	<0.0003	<0.0006
	02/01/94	<0.2	<0.0003	<0.0003	<0.0003	<0.0006
MW3	05/25/88	83.0	15.000	18.000	2.900	14.000
MW4	01/26/89	<0.05	<0.0002	<0.0002	<0.0002	<0.0002
	05/03/90	<1.0	0.003	<0.001	<0.001	<0.001
	07/24/91	0.87	0.206	<0.001	0.002	<0.002
	01/27/92	<0.05	0.060	0.001	0.002	<0.002
	05/01/92	<0.05	<0.001	<0.001	<0.001	<0.002
	07/29/92	<0.05	<0.001	<0.001	<0.001	<0.002
	11/06/92	<0.1	<0.0003	<0.0003	<0.0003	<0.0006
	02/05/93	<0.1	<0.0003	<0.0003	<0.0003	<0.0006
	05/07/93	<0.2	<0.0003	<0.0003	<0.0003	<0.0006
	08/05/93	<0.2	<0.0003	<0.0003	<0.0003	<0.0006
	02/01/94	<0.2	<0.0003	<0.0003	<0.0003	<0.0006
MW5	01/26/89	<0.05	<0.0002	<0.0002	<0.0002	<0.0002
	05/03/90	<1.0	<0.001	<0.001	<0.001	<0.001
	07/24/91	<0.05	<0.001	<0.001	<0.001	<0.002
	01/27/92	<0.05	<0.001	<0.001	<0.001	<0.002
	05/01/92	<0.05	<0.001	<0.001	<0.001	<0.002
	07/29/92	<0.05	<0.001	<0.001	<0.001	<0.002
	11/06/92	<0.1	<0.0003	<0.0003	<0.0003	<0.0006
	02/05/93	<0.1	<0.0003	<0.0003	<0.0003	<0.0006
	05/07/93	<0.2	<0.0003	<0.0003	<0.0003	<0.0006
	02/01/94	<0.2	<0.0003	<0.0003	<0.0003	<0.0006
MW6	01/26/89	<0.05	<0.0002	<0.0002	<0.0002	<0.0002
	05/03/90	<1.0	<0.001	<0.001	<0.001	<0.001
	07/24/91	<0.05	<0.001	0.002	<0.001	<0.002
	01/27/92	<0.05	<0.001	<0.001	<0.001	<0.002
	05/01/92	<0.05	<0.001	<0.001	<0.001	<0.002
	07/29/92	<0.05	<0.001	<0.001	<0.001	<0.002
	02/05/93	<0.1	<0.0003	<0.0003	<0.0003	<0.0006
	05/07/93	<0.2	<0.0003	<0.0003	<0.0003	<0.0006
	02/01/94	<0.2	<0.0003	0.0008	<0.0003	0.00102

Table 2 (cont'd)

Summary of Historical Groundwater Analytical Results (Table 1, Frey 1994)

LABORATORY RESULTS
(mg/L - groundwater)

Date Sampled	Petroleum Hydrocarbons Gasoline	Benzene	Toluene	Ethyl Benzene	Xylenes
05/03/90	5.3	0.360	0.085	<0.001	0.016
07/24/91	2.9	0.414	0.016	0.028	0.133
01/27/92	4.1	1.470	0.383	0.206	0.209
05/01/92	2.1	0.300	0.006	0.037	0.125
07/29/92	3.3	0.013	0.008	<0.001	0.261
11/06/92	4.2	0.958	0.114	0.112	0.0681
02/05/93	3.3	0.610	0.129	0.162	0.149
05/07/93	6.5	0.0859	0.0039	0.0034	0.021
08/05/93	11.8	1.3000	0.0271	0.190	0.0683
11/04/93	2.46	0.00481	0.0102	<0.0003	0.0109
02/01/94	4.71	0.655	0.00807	0.00567	0.0237
05/02/94	3.84	0.479	0.0071	0.0368	0.0341
05/03/90	<1.0	<0.001	<0.001	<0.001	<0.001
01/27/92	<0.05	<0.001	0.003	0.001	0.002
05/01/92	<0.05	<0.001	<0.001	<0.001	<0.002
07/29/92	<0.05	<0.001	<0.001	<0.001	<0.002
11/06/92	<0.1	<0.0003	<0.0003	<0.0003	<0.0006
02/05/93	<0.1	<0.0003	<0.0003	<0.0003	<0.0006
05/07/93	<0.2	<0.0003	<0.0003	<0.0003	<0.0006
11/04/93	<0.2	<0.0003	<0.0003	<0.0003	<0.0006
05/02/94	<0.1	0.0039	0.0079	0.0025	0.0092
05/03/90	<1.0	<0.001	<0.001	<0.001	<0.001
07/24/91	<0.05	<0.001	0.001	<0.001	<0.002
01/27/92	<0.05	0.179	0.002	0.014	0.006
05/01/92	0.3	0.185	<0.001	0.022	<0.002
07/29/92	0.1	0.037	<0.001	<0.001	<0.002
11/06/92	0.1	0.0209	<0.0003	0.0012	<0.0006
02/05/93	<0.1	<0.0003	<0.0003	<0.0003	<0.0006
05/07/93	<0.2	<0.0003	<0.0003	<0.0003	<0.0006
08/05/93	<0.2	0.0306	0.0022	0.0033	0.0051
11/04/93	<0.2	<0.0003	<0.0003	<0.0003	<0.0006
02/01/94	<0.2	<0.0003	<0.0003	<0.0003	<0.0006
05/02/94	<0.1	<0.0003	<0.0003	<0.0003	<0.0006
02/05/93	<0.1	<0.0003	<0.0003	<0.0003	<0.0006
05/07/93	<0.2	<0.0003	<0.0003	<0.0003	<0.0006
08/05/93	<0.2	<0.0003	<0.0003	<0.0003	<0.0006
11/04/93	<0.2	<0.0003	<0.0003	<0.0003	<0.0006
02/01/94	<0.2	<0.0003	<0.0003	<0.0003	<0.0006
05/02/94	<0.1	<0.0003	<0.0003	<0.0003	<0.0006
a (Groundwater)					
ls[a]		0.001	0.100	0.680	1.750

Table 2
Summary of Soil Analytical Results
Excavated Soil Stockpile Sampling

Sample I.D.		Results of Initial Screening	Date Sampled	EPA 8015 Volatile Fuel Hydrocarbons (mg/kg)	EPA 8020 Benzene (mg/kg)	EPA 8020 Toluene (mg/kg)	EPA 8020 Ethylbenzene (mg/kg)	EPA 8020 Xylenes (mg/kg)	Classification
S-1	*	Low-VOC	08/03/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)	Clean
S-2	*	Low-VOC	08/03/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)	Clean
S-3	*	Low-VOC	08/03/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)	Clean
S-4	*	Moderate-VOC	08/03/95	1.5	0.017	0.015	0.025	(0.005)	Hydrocarbon-Impacted
S-5	*	Moderate-VOC	08/03/95	(1.0)	(0.005)	0.0055	(0.005)	(0.005)	Hydrocarbon-Impacted
S-6	*	Moderate-VOC	08/03/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)	Hydrocarbon-Impacted
S-7		High-VOC	08/04/95	18	0.18	0.17	0.31	1.4	Hydrocarbon-Impacted
S-8		High-VOC	08/04/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)	Hydrocarbon-Impacted**
S-9		Low-VOC	08/04/95	(1.0)	(0.005)	(0.005)	0.006	0.021	Clean
S-10		Low-VOC	08/04/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)	Clean
S-11		Moderate-VOC	08/04/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)	Clean
S-12		Moderate-VOC	08/04/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)	Clean
S-13		Moderate-VOC	08/04/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)	Clean
S-14		High-VOC	08/08/95	37	0.009	(0.005)	0.005	0.47	Hydrocarbon-Impacted
S-15		High-VOC	08/08/95	250	3.3	1.4	4.4	18	Hydrocarbon-Impacted
S-16		High-VOC	08/08/95	730	2.9	18	15	45	Hydrocarbon-Impacted
S-17		High-VOC	08/08/95	680	9.8	24	13	56	Hydrocarbon-Impacted
S-18	*	Moderate-VOC	08/08/95	4.5	0.013	0.085	0.044	0.35	Hydrocarbon-Impacted
S-19	*	Moderate-VOC	08/08/95	3.7	0.028	0.37	0.2	1.4	Hydrocarbon-Impacted
S-20		Low-VOC	08/09/95	(1.0)	(0.005)	(0.005)	(0.005)	0.006	Resampled: S-27; S-28
S-21		Low-VOC	08/09/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)	Resampled: S-27; S-28
S-22		Low-VOC	08/09/95	1.0	0.024	(0.005)	0.034	0.056	Resampled: S-27; S-28
S-23		Moderate-VOC	08/10/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)	Clean

Notes:
mg/kg = milligrams per kilogram.
* indicates that the sample was collected under OCHCA supervision.
(1.0) = compound not detected above enclosed detection limits.
** = additional samples collected from this stockpile were hydrocarbon-impacted.

Table 2
Summary of Soil Analytical Results
Excavated Soil Stockpile Sampling

Sample I.D.		Results of Initial Screening	Date Sampled	EPA 8015 Volatile Fuel Hydrocarbons (mg/kg)	EPA 8020 Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Classification
S-24		Moderate-VOC	08/10/95	2.3	0.076	0.024	0.03	0.23	Resampled: S-31
S-25		Moderate-VOC	08/10/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)	Clean
S-26		Moderate-VOC	08/10/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)	Clean
S-27	*	Low-VOC	08/10/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)	Clean
S-28	*	Low-VOC	08/10/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)	Clean
S-29		High-VOC	08/11/95	140	(0.005)	0.024	0.011	4.6	Hydrocarbon-Impacted
S-30		High-VOC	08/11/95	170	0.007	0.015	0.009	5.6	Hydrocarbon-Impacted
S-31	*	Moderate-VOC	08/14/95	7.6	0.073	(0.005)	0.19	0.065	Hydrocarbon-Impacted
S-32	*	Moderate-VOC	08/14/95	(1)	(0.005)	(0.005)	(0.005)	(0.005)	Clean
S-33	*	Moderate-VOC	08/14/95	(1)	(0.005)	(0.005)	(0.005)	(0.005)	Clean
S-34	*	Moderate-VOC	08/14/95	(1)	(0.005)	(0.005)	(0.005)	(0.005)	Clean
S-35		Moderate-VOC	08/18/95	(1)	(0.005)	(0.005)	(0.005)	(0.005)	Clean
S-36		Moderate-VOC	08/18/95	(1)	(0.005)	(0.005)	(0.005)	(0.005)	Clean

Notes:
mg/kg = milligrams per kilogram.
* indicates that the sample was collected under OCHCA supervision.
(1.0) = compound not detected above enclosed detection limits.

Table 3
Summary of Soil Analytical Results
Treatment Stockpile Interim Sampling

Sample Location	Depth (Feet)	Date Sampled	EPA 8015 Volatile Hydrocarbons (mg/kg)	EPA 8020 Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)
TS-1	3	10/10/95	(1.0)	(0.005)	(0.005)	(0.005)	0.009
TS-2	1	10/10/95	860	2.7	34	13	64
TS-3	7	10/10/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)
SPl-5 *	2-5	10/05/95	290	(0.005)	0.920	0.530	1.50
TS-4	7	10/10/95	320	(0.005)	0.008	2.2	4.3
TS-4	9	10/10/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)
SPl-17 *	2-5	10/05/95	180	(0.005)	0.500	0.720	3.30
TS-5	6	10/10/95	6	0.011	(0.005)	0.26	0.20
TS-6	6	10/10/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)
TS-7	9	10/10/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)
TS-8	6	10/10/95	(1.0)	(0.005)	(0.005)	(0.005)	0.005
TS-9	6	10/10/95	150	(0.005)	(0.005)	1.1	1.9
TS-10	9	10/10/95	2.7	0.008	(0.005)	0.050	(0.005)
TS-11	3	10/10/95	(1.0)	(0.005)	0.019	0.006	0.033
TS-12	1	11/01/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)
TS-13	9	11/01/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)
TS-14	6	11/01/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)
TS-15	3	11/01/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)
TS-16	3	11/01/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)
TS-17	3	11/01/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)
TS-18	6	11/01/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)
TS-19	3	11/01/95	(1.0)	(0.005)	(0.005)	(0.005)	(0.005)
TS-20	9	11/01/95	1.8	0.007	(0.005)	0.037	(0.005)
TS-21	6	11/01/95	1.4	(0.005)	(0.005)	0.052	(0.005)

Notes:
Samples were labeled and appear as S-1, S-2, etc. on laboratory reports and chains-of-custody. Samples were redesignated as TS-1, in tables and on drawings appearing in this report to avoid confusion with samples collected from the excavated soil stockpiles (S-
mg/kg = milligrams per kilogram.
(1.0) = compound not detected above enclosed detection limits.
* = Selected Ray Environmental analytical result

APPENDIX C

NFF 1
Gauge #10

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
	Not Required	1	800-434-9300	20373 C

5. Generator's Name and Mailing Address
Goldenwest College
15744 Goldenwest Street
Huntington Beach, CA 92647
Generator's Phone: 714-438-4728-David

Generator's Site Address (if different than mailing address)
Site: Same

6. Transporter 1 Company Name: Whittier Drum & Vacuum, Inc.
U.S. EPA ID Number: CAD000626210

7. Transporter 2 Company Name: Miramontes Transportation Inc.
U.S. EPA ID Number: CA2000184309

8. Designated Facility Name and Site Address
WESTERN ENVIRONMENTAL
62-150 GENE WELMAS DR.
MECCA, CA 92554
Facility's Phone: 760-398-0222
U.S. EPA ID Number: CAR000167208

9. Waste Shipping Name and Description	10. Containers No.	Type	11. Total Quantity	12. Unit Wt./Vol.
1. NON HAZARDOUS SOLID	1	CM	15	Y
2.				
3.				
4.				

13. Special Handling Instructions and Additional Information
WEAR PROPER SAFETY GEAR WHEN HANDLING
(Sun Env)
PROFILE# 20101410/WEI1411

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.
Generator's/Offeror's Printed/Typed Name: DEEPAK CHAUHAN
Signature: [signature]
Month 4 Day 27 Year 10

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

16. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Billy Mariscal
Signature: [signature]
Month 4 Day 27 Year 10

Transporter 2 Printed/Typed Name: Jairo Bayardo
Signature: [signature]
Month 05 Day 13 Year 10

17. Discrepancy
17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

17b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a
Printed/Typed Name: [signature]
Signature: [signature]
Month 5 Day 13 Year 10

GENERATOR — INT'L — TRANSPORTER — DESIGNATED FACILITY

95 Y

Reg# 75

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
	Not Required	1	800-434-9300	30373 A

5. Generator's Name and Mailing Address
Goldenwest College
15744 Goldenwest Street
Huntington Beach, CA 92647

Generator's Site Address (if different than mailing address)
Site: Same

Generator's Phone: 714-438-4728-David

6. Transporter 1 Company Name
Whittier Drum & Vacuum, Inc.

U.S. EPA ID Number: CAD008282816

7. Transporter 2 Company Name
DR. VACUUM INC.

U.S. EPA ID Number: CAT080033253

8. Designated Facility Name and Site Address
WESTERN ENVIRONMENTAL
82-150 GENE WELMAS DR.
MECCA, CA 92254

U.S. EPA ID Number: CAR000157206

Facility's Phone: 760-396-0222

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.
1.	NON HAZARDOUS SOLID	1	CM	15	Y
2.					
3.		A		10	
4.					

13. Special Handling Instructions and Additional Information
WEAR PROPER SAFETY GEAR WHEN HANDLING. PROFILE# WE1-1911
(Sun Env)

14. GENERATOR'S CERTIFICATION: I certify the materials described above on the manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Generator's/Offeror's Printed/Typed Name: DEEMAK CHAUHAN | Signature | Month 4 | Day 27 | Year 10

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Billy Maniscal | Signature | Month 4 | Day 27 | Year 10

Transporter 2 Printed/Typed Name: FRANCISCO J. GUARDADO | Signature | Month 5 | Day 6 | Year 10

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name | Signature | Month 5 | Day 11 | Year 10

GENERATOR — INTL — TRANSPORTER — DESIGNATED FACILITY

169-BLC-O 5 .11977 (Rev. 8/06) TRANSPORTER #2

ON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
Not Required		800-434-9300	70373

5. Generator's Name and Mailing Address
Goldenwest College
15744 Goldenwest Street
Huntington Beach, CA 92647

Generator's Site Address (if different than mailing address)
Site: Same

Generator's Phone: 714-898-4320 David

6. Transporter 1 Company Name
~~APEX Trucking~~ MONROY TRUCKING

U.S. EPA ID Number
CAR 000099614
~~CAR000065963~~

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address
WESTERN ENVIRONMENTAL
82-150 GENE WELMAS DR.
MECCA, CA 92554

U.S. EPA ID Number
CAR000157206

Facility's Phone: 760-396-0222

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.
1.	NON HAZARDOUS SOLID	001	DT	18	Y
2.					
3.					
4.					

13. Special Handling Instructions and Additional Information
WEAR PROPER SAFETY GEAR WHEN HANDLING (Sun Env) PROFILE# 2 010410 / WEI 1411

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Generator's/Offeror's Printed/Typed Name: DEEPAK CHAUHAN Signature: [signature] Month: 4 Day: 27 Year: 10

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: SERGIO MONROY Signature: [signature] Month: 4 Day: 27 Year: 10

Transporter 2 Printed/Typed Name: Signature: Month: Day: Year:

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) Month: Day: Year:

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: [illegible] Signature: [signature] Month: 4 Day: 27 Year: 10

GENERATOR | INTL | TRANSPORTER | DESIGNATED FACILITY

169-SLC-O 5 11977 (Rev. 6/06) TRANSPORTER #1

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
	Not Required	1	800-434-9300	00373

5. Generator's Name and Mailing Address: Golden West College, 15744 Golden West Street, Huntington Beach, CA 92647

Generator's Site Address (if different than mailing address): Site: Same

Generator's Phone: 714 438 1700 Gavin

6. Transporter 1 Company Name: ~~AFG Trucking~~ JAR Transportation — U.S. EPA ID Number: CAR000190835

7. Transporter 2 Company Name: — U.S. EPA ID Number:

8. Designated Facility Name and Site Address: WESTERN ENVIRONMENTAL, 82-150 GENE WELMAS DR., MECCA, CA 92554 — U.S. EPA ID Number: CAR000157208

Facility's Phone: 760-396-0222

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.
1.	NON HAZARDOUS SOLID	1	DT	18	Y
2.					
3.					
4.					

13. Special Handling Instructions and Additional Information: WEAR PROPER SAFETY GEAR WHEN HANDLING (Sun Env.) — PROFILE# 2010 P110 / WEI 1411

clean up load.

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Generator's/Offeror's Printed/Typed Name: DEEPAK CHAUHAN — Signature: [signature] — Month 4 Day 27 Year 10

15. International Shipments: ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: [signature] — Signature: [signature] — Month 4 Day 27 Year 10

Transporter 2 Printed/Typed Name: — Signature: — Month Day Year

17. Discrepancy

17a. Discrepancy Indicating Space: ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: [signature] — Signature: [signature] — Month 4 Day 28 Year 10

GENERATOR — INT'L — TRANSPORTER — DESIGNATED FACILITY

169-BLC-O 5 11977 (Rev. 8/06) TRANSPORTER #2

BACKHOE SOIL SAMPLING TECHNIQUES

Soil Sample Collection

Under the supervision of a geologist or engineer, soil sample are collected from within an excavation. The backhoe excavates to the desired sample depth within native soil and is excavated by the bucket to the backhoe. The bucket brought up to the surface and a soil sampling sleeve of brass or stainless steel is directly inserted into the excavated soil from the teeth of the backhoe bucket.

Quality Assurance/Quality Control

After retrieval the sleeve is removed and immediately sealed for laboratory analysis by covering both ends with teflon sheeting, plastic caps and securing the caps with tape. The collected sleeve is labeled and placed in an ice chest for cold storage pending transportation to a state certified laboratory. This packaging protocol is designed to prevent loss of volatiles from the soil sample, and to prevent any cross contamination. Standard chain-of-custody procedures are followed for all samples.

After completing sample preparation, an additional portion of soil is collected at about the sample depth of the retained sample. This soil is placed in a self sealing plastic bag to prevent the release of volatiles that may be present. A head-space measurement is taken by breaking the seal of the plastic bag or end cap of the ring just enough to insert a sample probe of the hydrocarbon detector.

The laboratory QA/QC procedures are not discussed in this report. However, a state certified laboratory will be used for sample analyses. State certified laboratories are required to perform and maintain records of all QA/QC.

APPENDIX D

Alpha Scientific Corporation
Environmental Laboratories

05-03-2010

Mr. Karl Kerner
Atlas Environmental Engineering, Inc.
3185 Airway Avenue, Suite D-1
Costa Mesa, CA 92626

Project: Goldenwest College
Project Site: 15744 Goldenwest St., H.B.
Sample Date: 04-27-2010
Lab Job No.: R004104

Dear Mr. Kerner:

Enclosed please find the analytical report for the sample(s) received by Alpha Scientific Corporation on 04-27-2010 and analyzed by the following EPA methods:

EPA 8015M (Total Petroleum Hydrocarbons)
EPA 8260B (VOCs & Oxygenates by GC/MS)

All analyses have met the QA/QC criteria of this laboratory.

The sample(s) arrived in good conditions (i.e., chilled, intact) and with a chain of custody record attached.

Alpha Scientific Corporation is a CA DHS certified laboratory (Certificate Number 2633). Thank you for giving us the opportunity to serve you. Please feel free to call me at (562) 809-8880 if our laboratory can be of further service to you.

Sincerely,

Roger Wang, Ph. D.
Laboratory Director

Enclosures

This cover letter is an integral part of this analytical report.

Client: Atlas Environmental Engineering, Inc.
Project: Goldenwest College
Project Site: 15744 Goldenwest St., H.B.
Matrix: Soil
Batch No. for TPH-g: CMD28-GS2
Prepared Method for TPH-d & o: EPA 3550B
Batch No. for TPH-d & o: BD28-DS1

Lab Job No.: R004104

Date Sampled: 04-27-2010
Date Received: 04-27-2010
Date Analyzed: 04-29-2010
Date Prepared: 04-28-2010
Date Analyzed: 04-28-2010
Date Reported: 05-03-2010

EPA 8015M (Total Petroleum Hydrocarbons)
Reporting Units: mg/kg (ppm)

Sample ID	Lab ID	Gasoline Range (C4-C12)*	Diesel Range (C13-C23)	Oil Range (C14-C40)
MDL		0.2	5	25
PQL		0.5	10	50
Method Blank		ND	ND	ND
EX1-12	R004104-1	1.0	12.9	ND
EX2-12	R004104-2	0.9	ND	ND
SW1-10	R004104-3	ND	ND	ND
SW2-10	R004104-4	ND	ND	ND
EX3-12	R004104-5	ND	ND	ND
EX4-12	R004104-6	ND	ND	ND
SW3-10	R004104-7	83.4	6.5J	ND
SW4-10	R004104-8	ND	ND	ND

* Gasoline Range TPH result is obtained from purge and trap analysis using LUFT-GCMS Method;
MDL: Method Detection Limit; PQL: Practical Quantitation Limit;
ND: Not Detected (below MDL); J: Trace Value.

Client: Atlas Environmental Engineering Inc. Lab Job No.: R004104 Date Reported: 05-03-2010
Project:Goldenwest College Matrix: Soil Date Sampled: 04-27-2010

EPA 8260B (VOCs by GC/MS, Page 1 of 2)
Reporting Unit: mg/kg(ppm)

DATE ANALYZED			04-29	04-29-10	04-29-10	04-29-10	04-29-10	04-29-10
DILUTION FACTOR (DF)			1	1	1	1	1	1
LAB SAMPLE I.D.				R004104-1	R004104-2	R004104-3	R004104-4	R004104-5
CLIENT SAMPLE I.D.				EX1-12	EX2-12	SW1-10	SW2-10	EX3-12
COMPOUND	**MDL**	**PQL**	MB					
Dichlorodifluoromethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Chloromethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Vinyl Chloride	0.001	0.002	ND	ND	ND	ND	ND	ND
Bromomethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Chloroethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	0.002	0.005	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.002	0.005	ND	ND	ND	ND	ND	ND
Iodomethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Methylene Chloride	0.005	0.010	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.002	0.005	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	0.002	0.005	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	0.002	0.005	ND	ND	ND	ND	ND	ND
Bromochloromethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Chloroform	0.002	0.005	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.001	0.005	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	0.001	0.005	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	0.002	0.005	ND	ND	ND	ND	ND	ND
Benzene	0.001	0.002	ND	ND	ND	ND	ND	ND
Trichloroethene	0.002	0.004	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	0.002	0.005	ND	ND	ND	ND	ND	ND
Bromodichloromethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Dibromomethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Trans-1,3-Dichloropropene	0.002	0.005	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	0.002	0.005	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.001	0.005	ND	ND	ND	ND	ND	ND
Dibromochloromethane	0.002	0.005	ND	ND	ND	ND	ND	ND
2-Chloroethylvinyl ether	0.002	0.010	ND	ND	ND	ND	ND	ND
Bromoform	0.002	0.005	ND	ND	ND	ND	ND	ND
Isopropylbenzene	0.002	0.005	ND	0.003J	ND	ND	ND	ND
Bromobenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
Toluene	0.001	0.002	ND	ND	ND	ND	ND	ND
Tetrachloroethene	0.002	0.004	ND	ND	ND	ND	ND	ND

Client: Atlas Environmental Engineering Inc. Lab Job No.: R004104 Date Reported: 05-03-2010
Project:Goldenwest College Matrix: Soil Date Sampled: 04-27-2010

EPA 8260B (VOCs by GC/MS, Page 1 of 2)
Reporting Unit: mg/kg(ppm)

DATE ANALYZED			04-29	04-29-10	04-29-10	04-29-10		
DILUTION FACTOR (DF)			1	1	1	1		
LAB SAMPLE I.D.				R004104-6	R004104-7	R004104-8		
CLIENT SAMPLE I.D.				EX4-12	SW3-10	SW4-10		
COMPOUND	**MDL**	**PQL**	MB					
Dichlorodifluoromethane	0.002	0.005	ND	ND	ND	ND		
Chloromethane	0.002	0.005	ND	ND	ND	ND		
Vinyl Chloride	0.001	0.002	ND	ND	ND	ND		
Bromomethane	0.002	0.005	ND	ND	ND	ND		
Chloroethane	0.002	0.005	ND	ND	ND	ND		
Trichlorofluoromethane	0.002	0.005	ND	ND	ND	ND		
1,1-Dichloroethene	0.002	0.005	ND	ND	ND	ND		
Iodomethane	0.002	0.005	ND	ND	ND	ND		
Methylene Chloride	0.005	0.010	ND	ND	ND	ND		
trans-1,2-Dichloroethene	0.002	0.005	ND	ND	ND	ND		
1,1-Dichloroethane	0.002	0.005	ND	ND	ND	ND		
2,2-Dichloropropane	0.002	0.005	ND	ND	ND	ND		
cis-1,2-Dichloroethene	0.002	0.005	ND	ND	ND	ND		
Bromochloromethane	0.002	0.005	ND	ND	ND	ND		
Chloroform	0.002	0.005	ND	ND	ND	ND		
1,2-Dichloroethane	0.001	0.005	ND	ND	ND	ND		
1,1,1-Trichloroethane	0.002	0.005	ND	ND	ND	ND		
Carbon tetrachloride	0.001	0.005	ND	ND	ND	ND		
1,1-Dichloropropene	0.002	0.005	ND	ND	ND	ND		
Benzene	0.001	0.002	ND	ND	ND	ND		
Trichloroethene	0.002	0.004	ND	ND	ND	ND		
1,2-Dichloropropane	0.002	0.005	ND	ND	ND	ND		
Bromodichloromethane	0.002	0.005	ND	ND	ND	ND		
Dibromomethane	0.002	0.005	ND	ND	ND	ND		
Trans-1,3-Dichloropropene	0.002	0.005	ND	ND	ND	ND		
cis-1,3-Dichloropropene	0.002	0.005	ND	ND	ND	ND		
1,1,2-Trichloroethane	0.002	0.005	ND	ND	ND	ND		
1,3-Dichloropropane	0.001	0.005	ND	ND	ND	ND		
Dibromochloromethane	0.002	0.005	ND	ND	ND	ND		
2-Chloroethylvinyl ether	0.002	0.010	ND	ND	ND	ND		
Bromoform	0.002	0.005	ND	ND	ND	ND		
Isopropylbenzene	0.002	0.005	ND	ND	ND	ND		
Bromobenzene	0.002	0.005	ND	ND	ND	ND		
Toluene	0.001	0.002	ND	ND	ND	ND		
Tetrachloroethene	0.002	0.004	ND	ND	ND	ND		

Client: Atlas Environmental Engineering Inc. Lab Job No.: R004104 Date Reported: 05-03-2010
Project:Goldenwest College Matrix: Soil Date Sampled: 04-27-2010

EPA 8260B (VOCs & Oxygenates by GC/MS, Page 2 of 2)

Reporting Unit: mg/kg(ppm)

COMPOUND	MDL	PQL	MB	EX1-12	EX2-12	SW1-10	SW2-10	EX3-12
1,2-Dibromoethane(EDB)	0.002	0.005	ND	ND	ND	ND	ND	ND
Chlorobenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Ethylbenzene	0.001	0.002	ND	0.005	ND	ND	ND	ND
Total Xylenes	0.002	0.004	ND	ND	0.031	ND	ND	ND
Styrene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.002	0.005	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	0.002	0.005	ND	ND	ND	ND	ND	ND
n-Propylbenzene	0.002	0.005	ND	0.005	0.025	ND	ND	ND
2-Chlorotoluene	0.002	0.005	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	0.002	0.005	ND	ND	0.021	ND	ND	ND
tert-Butylbenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	0.002	0.005	ND	ND	0.028	ND	ND	ND
Sec-Butylbenzene	0.002	0.005	ND	0.003J	ND	ND	ND	ND
1,3-Dichlorobenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
n-Butylbenzene	0.002	0.005	ND	0.003J	0.005	ND	ND	ND
1,2,4-Trichlorobenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-Chloropropane	0.002	0.005	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	0.002	0.005	ND	ND	ND	ND	ND	ND
Naphthalene	0.002	0.005	ND	0.005	ND	ND	ND	ND
1,2,3-Trichlorobenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
Acetone	0.050	0.100	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	0.035	0.050	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	0.035	0.050	ND	ND	ND	ND	ND	ND
2-Hexanone	0.035	0.050	ND	ND	ND	ND	ND	ND
Ethanol	0.50	1.00	ND	ND	ND	ND	ND	ND
Isopropyl Alcohol	0.50	1.00	ND	ND	ND	ND	ND	ND
MTBE	0.002	0.005	ND	0.033	ND	ND	ND	ND
ETBE	0.002	0.005	ND	ND	ND	ND	ND	ND
DIPE	0.002	0.005	ND	ND	ND	ND	ND	ND
TAME	0.002	0.005	ND	ND	ND	ND	ND	ND
T-Butyl Alcohol	0.020	0.050	ND	ND	ND	ND	ND	ND

MDL=Method Detection Limit; PQL=Practical Quantification Limit; MB=Method Blank;
ND=Not Detected (below DF × MDL); * Obtained from a higher dilution analysis; J:Trace value.

Client: Atlas Environmental Engineering Inc. Lab Job No.: R004104 Date Reported: 05-03-2010
Project:Goldenwest College Matrix: Soil Date Sampled: 04-27-2010

EPA 8260B (VOCs & Oxygenates by GC/MS, Page 2 of 2)

Reporting Unit: mg/kg(ppm)

COMPOUND	MDL	PQL	MB	EX4-12	SW3-10	SW4-10		
1,2-Dibromoethane(EDB)	0.002	0.005	ND	ND	ND	ND		
Chlorobenzene	0.002	0.005	ND	ND	ND	ND		
1,1,1,2-Tetrachloroethane	0.002	0.005	ND	ND	ND	ND		
Ethylbenzene	0.001	0.002	ND	ND	ND	ND		
Total Xylenes	0.002	0.004	ND	ND	ND	ND		
Styrene	0.002	0.005	ND	ND	ND	ND		
1,1,2,2-Tetrachloroethane	0.002	0.005	ND	ND	ND	ND		
1,2,3-Trichloropropane	0.002	0.005	ND	ND	ND	ND		
n-Propylbenzene	0.002	0.005	ND	ND	ND	ND		
2-Chlorotoluene	0.002	0.005	ND	ND	ND	ND		
4-Chlorotoluene	0.002	0.005	ND	ND	ND	ND		
1,3,5-Trimethylbenzene	0.002	0.005	ND	ND	ND	ND		
tert-Butylbenzene	0.002	0.005	ND	ND	ND	ND		
1,2,4-Trimethylbenzene	0.002	0.005	ND	ND	ND	ND		
Sec-Butylbenzene	0.002	0.005	ND	ND	ND	ND		
1,3-Dichlorobenzene	0.002	0.005	ND	ND	ND	ND		
p-Isopropyltoluene	0.002	0.005	ND	ND	ND	ND		
1,4-Dichlorobenzene	0.002	0.005	ND	ND	ND	ND		
1,2-Dichlorobenzene	0.002	0.005	ND	ND	ND	ND		
n-Butylbenzene	0.002	0.005	ND	ND	ND	ND		
1,2,4-Trichlorobenzene	0.002	0.005	ND	ND	ND	ND		
1,2-Dibromo-3-Chloropropane	0.002	0.005	ND	ND	ND	ND		
Hexachlorobutadiene	0.002	0.005	ND	ND	ND	ND		
Naphthalene	0.002	0.005	ND	ND	ND	ND		
1,2,3-Trichlorobenzene	0.002	0.005	ND	ND	ND	ND		
Acetone	0.050	0.100	ND	ND	ND	ND		
2-Butanone (MEK)	0.035	0.050	ND	ND	ND	ND		
4-Methyl-2-pentanone (MIBK)	0.035	0.050	ND	ND	ND	ND		
2-Hexanone	0.035	0.050	ND	ND	ND	ND		
Ethanol	0.50	1.00	ND	ND	ND	ND		
Isopropyl Alcohol	0.50	1.00	ND	ND	ND	ND		
MTBE	0.002	0.005	ND	ND	ND	ND		
ETBE	0.002	0.005	ND	ND	ND	ND		
DIPE	0.002	0.005	ND	ND	ND	ND		
TAME	0.002	0.005	ND	ND	ND	ND		
T-Butyl Alcohol	0.020	0.050	ND	ND	ND	ND		

MDL=Method Detection Limit; PQL=Practical Quantification Limit; MB=Method Blank;
ND=Not Detected (below DF × MDL); * Obtained from a higher dilution analysis; J:Trace value.

05-03-2010

TPH-Gasoline
Batch QA/QC Report

Client:	Atlas Environmental Engineering, Inc.	Lab Job No:	R004104
Project:	Goldenwest College		
Matrix:	Soil	Lab Sample ID:	D004114-1
Batch No:	CMD28-GS2	Date Analyzed:	04-29-2010

I. MS/MSD Report
Unit: ppb

Analyte	Sample Conc.	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
TPH-g	ND	1,000	1,030	998	103.0	99.8	3.2	30	70-130

II. LCS Result
Unit: ppb

Analyte	LCS Value	True Value	Rec.%	Accept. Limit
TPH-g	914	1,000	91.4	80-120

ND: Not Detected (at the specified limit).

05-03-2010

EPA 8015M (TPH)
Batch QA/QC RePort

Client:	Atlas Environmental Engineering, Inc.	Lab Job No:	R004104
Project:	Goldenwest College		
Matrix:	Soil	Lab Sample ID:	PA004106-2
Batch No.:	BD28-DS1	Date Analyzed:	04-28-2010

I. MS/MSD Report
Unit: ppm

Analyte	Sample Conc.	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
TPH-D	ND	200	227	226	113.5	113.0	0.4	30	70-130

II. LCS Report
Unit: ppm

Analyte	LCS Report Value	True Value	Rec.%	Accept. Limit
TPH-D	225	200	112.5	80-120

ND: Not Detected (at the specified limit).

05-03-2010

EPA Method 8260B
Batch QA/QC Report

Client:	Atlas Environmental Engineering, Inc.	Lab Job No:	R004104
Project:	Goldenwest College		
Matrix:	Soil	Lab Sample ID:	D004114-1
Batch No:	0428-VOCS2	Date Analyzed:	04-29-2010

I. MS/MSD Report
Unit: ppb

Analyte	Sample Conc.	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
1,1-Dichloroethene	ND	20	17.1	18.4	85.5	92.0	7.3	30	70-130
Benzene	ND	20	18.6	20.5	93.0	102.5	9.7	30	70-130
Trichloro-ethene	ND	20	16.3	18.4	81.5	92.0	12.1	30	70-130
Toluene	ND	20	17.2	18.5	86.0	92.5	7.3	30	70-130
Chlorobenzene	ND	20	16.3	20.2	81.5	101.0	21.4	30	70-130

II. LCS Result
Unit: ppb

Analyte	LCS Value	True Value	Rec.%	Accept. Limit
1,1-Dichloroethene	17.0	20.0	85.0	80-120
Benzene	19.8	20.0	99.0	80-120
Trichloro-ethene	17.3	20.0	86.5	80-120
Toluene	18.6	20.0	93.0	80-120
Chlorobenzene	20.5	20.0	102.5	80-120

ND: Not Detected (at the specified limit)

CHAIN OF CUSTODY
County of Orange Health Care Agency
Environmental Health Division
1241 E. Dyer Rd., Ste. 120, Santa Ana, CA 92705
Telephone: (714) 433-6000 / FAX: (714) 754-1768

1. ALL SAMPLES ARE TO BE HANDLED AS COURT EVIDENCE, AND ARE TO BE PROPERLY STORED IN A SECURE LOCATION.
2. PLEASE WRITE LEGIBLY.
3. ATTACH THIS FORM TO THE ORIGINAL REPORT OF THE ANALYTICAL RESULTS AND RETURN THEM TO THIS OFFICE. LABORATORY RESULTS RECEIVED WITHOUT PROPER CHAIN OF CUSTODY DOCUMENTATION WILL NOT BE ACCEPTED.

4. **TO BE COMPLETED BY LABORATORY ANALYST**

LAB NO.: R004104
DATE RECEIVED: 4-27-2010
SAMPLE(S) CONDITION (PLEASE CHECK):
CHILLED: ✓ COUNTY SEAL(S) INTACT: ✓
CONTAINER IN GOOD CONDITION: ✓
DATE ANALYSIS COMPLETED: 5-3-2010
ANALYST: Mehrnghi 5-3-2010

5. **TO BE COMPLETED BY SAMPLE COLLECTOR**

SITE NAME/ADDRESS: Goldenwest College
15744 Goldenwest St, H.B.
DATE OF COLLECTION: 4/27/10
SAMPLE COLLECTOR/COMPANY: Tom / Atlas
TELEPHONE NO.: 714-865-7101
HCA REPRESENTATIVE: Julie Wozencraft

6.

R004104	SAMPLE NUMBER	DETERMINATION REQUESTED	SAMPLE DESCRIPTION/COMMENTS	TIME OF COLLECTION
-1	EX1-12	Tpha, Tphd, full scan	Confirmation Samples/Tank pit excavation	13:53
-2	EX2-12	VOCs (fuel oxy)	" " " (bottom)	13:56
-3	~~EX2~~ SW1-10		Sidewall	13:58
-4	SW2-10		Sidewall	14:01
-5	EX3-12		Tank Pit (Bottom)	14:05
-6	EX4-12		" " "	14:09
-7	SW3-10		Sidewall	14:13
-8	SW4-10		Sidewall	14:15

7. **CHAIN OF CUSTODY**

	SIGNATURE	COMPANY/AGENCY	INCLUSIVE DATES/TIMES
1.	[signature]	HCA/Env Hlth	4/27/10 13:53 – 14:17
2.	[signature]	Atlas	4/27/10 [redacted] – 14:17
3.	[signature]	ASC	4/27/10 6 SW
4.			
5.			
6.			

#2

WHITE-RETURN THIS COPY TO ENVIRONMENTAL HEALTH, CANARY-LABORATORY COPY
PINK-CONTRACTOR/CONSULTANT COPY, GOLDENROD-OFFICE COPY

F272 9.1531 1(R8/89) CRS

APPENDIX E

APPLICATION FOR WELL CONSTRUCTION PERMIT

ORANGE COUNTY HEALTH CARE AGENCY
ENVIRONMENTAL HEALTH DIVISION
1241 E. DYER ROAD, SUITE 120
SANTA ANA, CA 92705-4720
(714) 433-6000
FAX: (714) 433-6481

WELL PERMIT NUMBER 10.05.27

CITY: Huntington Beach

DATE: 5/6/2010

WELL LOCATION (ADDRESS IF AVAILABLE): 15744 Goldenwest Street

NAME OF WELL OWNER: Coast Community College District

ADDRESS: 1370 Adams Avenue

CITY: Costa Mesa ZIP: 92626 TELEPHONE: 7144384733

NAME OF CONSULTING FIRM: Atlas Environmental Engineering, Inc.

BUSINESS ADDRESS: 3185 Airway Avenue, Suite D-1

CITY: Costa Mesa ZIP: 92626 TELEPHONE: 7148907129

NAME OF DRILLING CO.: Strongarm C-57 LICENSE NO.: 766463

CITY: Norwalk ZIP: 90650 TELEPHONE: 562-404-6656

TYPE OF WELL *(CHECK)*

- PRIVATE DOMESTIC ☐
- PUBLIC DOMESTIC ☐
- IRRIGATION ☐
- CATHODIC ☐
- PROBE SURVEY ☒
- MONITORING ☐
- SOIL BORING ☐
- OTHER _____ ☐
- TOTAL NUMBER 5

A. WELLS – SUBMIT A WELL CONSTRUCTION DIAGRAM (INCLUDE DIMENSIONS)

B. SOIL BORINGS AND PROBES –
TOTAL DEPTH 30'
SEALING MATERIAL bentonite

C. PROPOSED START DATE 5/25/10

DIAGRAM OF WELL SITE *(Use additional sheets and/or attachments)*

* please see attached site plan for locations.

☒ SITE PLAN ATTACHED

I hereby agree to comply in every respect with all requirements of the Health Care Agency and with all ordinances and laws of the County of Orange and of the State of California pertaining to well construction, reconstruction and destruction, including the requirements to maintain the integrity of all significant confining zones.

APPLICANT'S SIGNATURE 5/20/10 DATE

Jerry Marchbank
PRINT NAME

714-438-4731 714-438-4893
PHONE NUMBER FAX NUMBER

FOR ACCOUNTING USE ONLY:

HSO NO. _____ CHECK NO. _____

DATE _____ AMOUNT FEE EXEMPT

INTL. _____

APPROVAL BY OTHER AGENCIES:

JURISDICTION _____

REMARKS _____

AUTHORIZED SIGNATURE DATE

DISPOSITION OF PERMIT (DO NOT FILL IN):

☒ **APPROVED** SUBJECT TO THE FOLLOWING CONDITIONS:

A. NOTIFY THIS AGENCY AT LEAST **48 HOURS**
- ☒ PRIOR TO START. Notify the agency if start date will change.
- ☐ PRIOR TO SEALING THE ANNULAR SPACE OR FILLING OF THE CONDUCTOR CASING.

B. ☐ SUBMIT TO THE AGENCY WITHIN 30 DAYS AFTER COMPLETION OF WORK, A WELL COMPLETION REPORT AND/OR DRILLING LOGS. PLEASE REFERENCE PERMIT NO.

C. ☒ SECURE ALL MONITORING WELLS TO PREVENT TAMPERING.

D. ☐ OTHER _____

☐ **DENIED** _____

Juan Arzola 05.21.2010
PERMIT ISSUED BY DATE

Juan Arzola 7144336287
PRINT NAME PHONE NUMBER

WHEN SIGNED BY ORANGE COUNTY HEALTH CARE AGENCY REPRESENTATIVE, THIS APPLICATION IS A PERMIT.

DIRECT PUSH SAMPLING PROCEDURES

Soil Sample Collection

Under the supervision of a geologist or engineer, the exploratory borings are advanced using a truck-mounted direct-push rig. A pilot assembly is driven and/or hydraulically pushed to the desired sample depth.

When the desired sample depth is reached, the tip is released and the sample barrel is advanced. Typically, sampling is conducted at about 5-foot intervals. The sampler consists of an outer barrel in which a set of thin sleeves can be inserted. These sleeves are generally brass or stainless steel. The sample barrel is about 18 inches long and usually holds no less than three sleeves.

The sample barrel is pushed and/or driven into the formation thereby filling all of the sleeves with soil. This method allows for collection of a relatively undisturbed soil sample and minimizing the introduction of overburden soil by a drilling process.

After retrieving and dismantling the sampler, all the thin tube rings are removed. The bottom ring is immediately sealed for laboratory analysis by covering both ends with teflon sheeting, plastic caps and securing the caps with tape. If some of the soil in the bottom ring has fallen out or appears to have been disturbed during the recovery operation, the second to the last ring will be used. This ring is labeled and placed in an ice chest for cold storage pending transportation to a state-certified laboratory. This packaging protocol is designed to prevent loss of volatile compounds from the soil sample, and to prevent any cross contamination. Standard chain-of-custody procedures are followed for all samples.

Soil from the second ring is used for field analysis of possible hydrocarbon contamination. The sample is either removed from the ring and placed in a self sealing plastic bag to prevent the release of volatile compounds that may be present or a portion of the sample removed from the ring and both ends of the ring capped. A head-space measurement is collected by breaking the seal of the plastic bag or ring end cap just enough to insert a sample probe of the hydrocarbon detector. The highest reading is recorded on the boring log.

Soil in the uppermost ring is discarded as borehole slough. The soil from the second ring as well as surface cuttings are examined to complete the field descriptions. This data includes a written soil description using the Unified Soil Classification System, any noticeable odors and any unique staining or contamination. Also noted are unusual drilling conditions, equipment malfunctions or other observations of field conditions for future reference. All data are recorded on the boring logs.

Quality Assurance/Quality Control

To prevent any cross contamination the probe rods are cleaned prior to advancement in each boring. The sampler is cleaned using steam or by using a three step process commonly referred to as a "three bucket wash". This consists of first a trisodium phosphate wash followed by two consecutive tap water rinses. This process is completed between each sample run. If required, one (1) "equipment" blank per 20 soil samples collected will be prepared for laboratory analysis as a check of cleaning methods used. The procedure is as follows:

1. The sampler will be washed or steam cleaned consist with field protocol for the day.

2. The sampler will be assembled and filled with clean silica sand.

3. The sampler will be dis-assembled and the blank sample prepared using the same protocol as the others collected during the day.

4. The blank sample will be analyzed for all constituents required.

The laboratory QA/QC procedures are not discussed in this report. However, a state-certified laboratory will be used for chemical analysis. State-certified laboratories are required to perform and maintain records of all QA/QC activities.

Waste Storage and Disposal

All excess sample material recovered during the probe operations and probe cleaning water are placed in DOT-approved, 55-gallon drums pending laboratory analysis. The drums are sealed, labeled and left on site (no longer than 90 days) for proper subsequent disposal by the generator.

GROUNDWATER SAMPLING PROCEDURES

Groundwater Sample Collection

The probe is advanced a minimum of 12 inches into groundwater where the tip is released and the probe is retracted to either expose a well screen or open section to allow water to be sampled.

A sample is collected just below the water surface using a bailer (Teflon, stainless steel or disposable, all bottom emptying) and placed into a laboratory supplied vial. The vial is completely filled, cap immediately placed over the top and securely tightened. The vial is inverted and tapped to determine if air bubbles are present. If none, the sample is labeled, and placed on ice in an ice chest until delivery to the laboratory.

Quality Control/Quality Assurance

1. The samples are transported to the laboratory as soon as possible following chain-of-custody procedures. In the event a holding time of greater than 7 days is required, the laboratory will be requested to supply vials with the appropriate preservatives for the analyses requested.

2. Site conditions are noted which may potentially contaminate the sample i.e. smoke, vapors from running engines, etc.

3. If a single bailer is used for collection of all samples, an "equipment blank" sample will be collect following the same protocol of sample collection. The same water supply used to rinse the equipment will be used to collect the blank sample.

4. A trip blank, if required, supplied by the analytical laboratory will be stored and transported with the samples until their delivery back to the laboratory.

5. The blank samples will be analyzed for all constituents.

Sample Shipment and Chain-of-Custody

Complete records are kept on each sample including sampling date, sample type, location, and other pertinent information. The sample containers are banded and sealed with chain-of-custody seals. The samples are chilled in an ice chest using block or blue ice. Care is taken not cause sample freezing which may result in container breakage during transport to the laboratory.

Chain-of-Custody procedures, generally described in Test Methods for Evaluating Solid Waste, SW-846, U.S. EPA, 1982, are followed. A chain-of-custody form accompanies the sample from the place of collection to the laboratory, and through the completion of the analytical process. The chain-of-custody form includes project identification information, the sample type and number, the date and time of sampling, the chemical analyses requested, and the identity of the person taking possession at each change of custody.

Equipment Cleaning

When steam-cleaning is not available, the "three bucket" wash is used. The three (3) bucket wash consists of an Alconox solution cleaning, a tap water rinse and a distilled water rinse. No solvent (hexane) rinses will be used. For bailers, the Alconox solution is flushed completely through the inside followed by flushing with tap water.

Waste Storage and Disposal

The effluent and/or decon water generated during the testing and equipment cleaning is placed in 55 gallon DOT-approved, 55-gallon drums. The drums are sealed, labeled and stored on site pending subsequent proper disposal/ treatment by the generator.

APPENDIX F

ATLAS ENVIRONMENTAL ENGINEERING, INC.
3185 AIRWAY AVENUE
COSTA MESA, CALIFORNIA 92626
(714) 890 - 7129

PROJECT STATUS REPORT

GOLDENWEST COLLEGE

15744 GOLDENWEST STREET

HUNTINGTON BEACH, CALIFORNIA

AE JOB NO./INV. GWC -Q210

DATE: **MAY** 20, 2010

OBSERVATION WELLS

NO.	DTW	DTP	PT	GALLONS	DTB	DIA.	ELEVATION			ODORS			F/P	
			FEET	REMOVED	FEET	INCH	CDTW	SWE	E-WAT	YES	NO	SLIGHT	YES	NO
MW-1	8.59			5.00	13.00	3.00	8.59	24.75	16.16	-	X	-	-	X
MW-2	8.56			27.00	24.00	4.00	8.56	24.97	16.41	-	X	-	-	X
MW-3	7.50			127.00	16.00	10.00	7.50	24.25	16.75	-	X	-	-	X
MW-4	8.80			18.00	20.80	4.00	8.80	24.01	15.21	-	X	-	-	X
MW-5	8.45			12.00	18.60	4.00	8.45	24.21	15.76	-	X	-	-	X
MW-6	8.25			25.00	20.90	4.00	8.25	26.47	18.22	-	X	-	-	X
MW-7	8.52			15.00	20.90	4.00	8.52	24.46	15.94	-	X	-	-	X
MW-8	8.70			17.00	20.80	4.00	8.70	24.60	15.90	-	X	-	-	X
MW-9	7.70			18.00	20.50	4.00	7.70	23.83	16.13	-	X	-	-	X
MW-10	9.75			5.00	20.20	2.00	9.75	25.53	15.78	-	X	-	-	X

EXPLANATION

DTW - DEPTH TO WATER FROM SURFACE — DTP - DEPTH TO PRODUCT FROM SURFACE — PT - PRODUCT THICKNESS
MEASUREMENTS IN FEET — DTB - DEPTH TO BOTTOM — DIA - WELL DIAMETER
CDTW - CORRECTED DEPTH TO WATER FOR PRESENCE OF FREE PRODUCT (USING SPECIFIC GRAVITY OF 0.755)
SWE - SURVEYED WELL HEAD ELEVATION — E-WAT - ELEVATION OF WATER — F/P - FREE PRODUCT

REMARKS

FREE PRODUCT REMOVED: APPROX. _____ GALLONS TOTAL TO DATE: _____ GALLONS
GROUNDWATER(*) REMOVED: APPROX. 269.00 GALLONS TOTAL TO DATE: 269.00 GALLONS

(*) PRODUCT/GROUNDWATER MIXTURE/DECON. WATER

55 GALLON DRUM: PROD. _____ GALLONS DIA _____ DTW
WATER _____ GALLONS TD _____ DTP

DATA RECORDED BY: E.G. INPUT BY: E.G.

FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

SITE/JOB: GOLDENWEST COLLEGE — DATE: MAY 20 2010

ADDRESS: 9063 RECREATION CIRCLE, FOUNTAIN VALLEY, CA

PERSONNEL: EUGENIU GASMAN — WEATHER: SUNNY

WELL NO.: MW 1 — EQUIPMENT: VAC TRUCK DISP. BAILER

Before Purging

Total Well Depth	13	Ft.	Well Diameter	2.5	Inch.
Depth to Water	8.59	Ft.	Est. Purge Vol.	12	Gal.

Sampling Data

Initial Turbidity: 19.1 — Final Turbidity: 9.0

DO: — ORP:

Time (MT)	1015	1019	10.22	10:25		
EC						
pH	8.5	8.5	8.6	8.7		
Temp. (°F)						
(°C)	18.9	20.4	20.7	20.8		
Gal.	2	3	4	5		
				DRY		
Time (MT)						
EC						
pH						
Temp. (°F)						
(°C)						
Gal.						

After Purging/Before Sample Collection

Depth to Water: 8.92 Ft. — Total Well Depth: 13.00 Ft.

FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

SITE/JOB: GOLDENWEST COLLEGE DATE: MAY 20 2010

ADDRESS: 9063 RECREATION CIRCLE, FOUNTAIN VALLEY, CA

PERSONNEL: EUGENIU GASMAN WEATHER: P. CLOUDY

WELL NO.: MW 2 EQUIPMENT: VAC TRUCK

Before Purging

Total Well Depth	24	Ft.	Well Diameter	4	Inch.
Depth to Water	8.56	Ft.	Est. Purge Vol.	41	Gal.

Sampling Data

Initial Turbidity: 16.9 Final Turbidity: 8.3

DO: ORP:

Time (MT)	8:15	8.17	8.20	8.22	8.25	8.30
EC						
pH	8.3	8.3	8.3	8.2	8.2	8.2
Temp. (°F)						
(°C)	27	23	21	20.7	19.5	19.5
Gal.	5	10	15	17	19	25
Time (MT)	8:35					
EC						
pH	8.2					
Temp. (°F)						
(°C)	19.5					
Gal.	27					
	DRY					

After Purging/Before Sample Collection

Depth to Water: 9.3 Ft. Total Well Depth: 24 Ft.

FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

SITE/JOB *GOLDENWEST COLLEGE* DATE *MAY 20 2010*

ADDRESS *9063 RECREATION CIRCLE, FOUNTAIN VALLEY, CA*

PERSONNEL *EUGENIU GASMAN* WEATHER SUNNY

WELL NO. MW 3 EQUIPMENT VAC TRUCK DISP. BAILER

Before Purging

Total Well Depth	16.	Ft.	Well Diameter	10	Inch.
Depth to Water	7.5	Ft.	Est. Purge Vol.	127	Gal.

Sampling Data

Initial Turbidity 15.0 Final Turbidity 8.5

DO ORP

Time (MT)	9:05	9:10	9:15	9:20	9:25	9:28
EC						
pH	8.1	8.1	8.0	8.2	8.2	8.2
Temp. (°F)						
(°C)	22.3	22.6	22.5	22.7	22.7	22.7
Gal.	15	25	35	45	100	127
Time (MT)						
EC						
pH						
Temp. (°F)						
(°C)						
Gal.						

After Purging/Before Sample Collection

Depth to Water 8.2 Ft. Total Well Depth 16.0 Ft.

FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

SITE/JOB: GOLDENWEST COLLEGE DATE: MAY 20 2010

ADDRESS: 9063 RECREATION CIRCLE, FOUNTAIN VALLEY, CA

PERSONNEL: EUGENIU GASMAN WEATHER: SUNNY

WELL NO.: MW4 EQUIPMENT: VAC TRUCK - WATER BAILER

Before Purging

Total Well Depth	20.8	Ft.	Well Diameter	4	Inch.
Depth to Water	8.8	Ft.	Est. Purge Vol.	38	Gal.

Sampling Data

Initial Turbidity: 10.5 Final Turbidity: 7.3

DO: ORP:

Time (MT)	942	946	949	953	955	
EC						
pH	8.2	8.2	8.2	8.4	8.3	
Temp. (°F)						
(°C)	21.5	20.9	20.2	20.2	20.3	
Gal.	3	6	10	15	18	
					DRY	
Time (MT)						
EC						
pH						
Temp. (°F)						
(°C)						
Gal.						

After Purging/Before Sample Collection

Depth to Water: 9.30 Ft. Total Well Depth: 20.8 Ft.

FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

SITE/JOB *GOLDENWEST COLLEGE* DATE *MAY 20 2010*

ADDRESS *9063 RECREATION CIRCLE, FOUNTAIN VALLEY, CA*

PERSONNEL *EUGENIU GASMAN* WEATHER SUNNY

WELL NO. MW 5 EQUIPMENT WE TRUCK, BAIL BAILER

Before Purging

Total Well Depth	18.6	Ft.	Well Diameter	4	Inch.
Depth to Water	8.45	Ft.	Est. Purge Vol.	27	Gal.

Sampling Data

Initial Turbidity 15.3 Final Turbidity 7.4

DO ORP

Time (MT)	9.28	9.38	9.34	9.37	9.40	
EC						
pH	7.9	8.3	8.5	8.6	8.6	
Temp. (°F)						
(°C)	21.8	21.2	20.9	20.2	20.5	
Gal.	5	8	9	10	12	
					DRY	
Time (MT)						
EC						
pH						
Temp. (°F)						
(°C)						
Gal.						

After Purging/Before Sample Collection

Depth to Water	9.57	Ft.	Total Well Depth	18.6	Ft.

FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

SITE/JOB: GOLDENWEST COLLEGE DATE: MAY 20 2010

ADDRESS: 9063 RECREATION CIRCLE, FOUNTAIN VALLEY, CA

PERSONNEL: EUGENIU GASMAN WEATHER: SUNNY

WELL NO.: MW6 EQUIPMENT: WATER TRUCK, DISP BAILER

Before Purging

Total Well Depth	20.9	Ft.	Well Diameter	4	Inch.
Depth to Water	8.25	Ft.	Est. Purge Vol.	34	Gal.

Sampling Data

Initial Turbidity: 19.3 Final Turbidity: 8.4

DO: ORP:

Time (MT)	1028	1030	1025	1040	1045	10.50
EC						
pH	8.4	8.4	8.4	8.4	8.4	8.4
Temp. (°F)						
(°C)	21.0	20.4	21.8	21.8	4.8	21.2
Gal.	4	8	12	16	20	25
						DRY
Time (MT)						
EC						
pH						
Temp. (°F)						
(°C)						
Gal.						

After Purging/Before Sample Collection

Depth to Water	9.30	Ft.	Total Well Depth	20.9	Ft.

FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

SITE/JOB *GOLDENWEST COLLEGE* DATE *MAY 20 2010*

ADDRESS *9063 RECREATION CIRCLE, FOUNTAIN VALLEY, CA*

PERSONNEL *EUGENIU GASMAN* WEATHER SUNNY

WELL NO. MW 7 EQUIPMENT VAC. TRUCK HAND BAILER

Before Purging

Total Well Depth	20.9	Ft.	Well Diameter	4	Inch.
Depth to Water	8.52	Ft.	Est. Purge Vol.	33	Gal.

Sampling Data

Initial Turbidity 21.3 Final Turbidity 9.0

DO ORP

Time (MT)	10:00	1006	1009	10:12	10:15	
EC						
pH	8.3	8.3	8.2	8.1	8.2	
Temp. (°F)						
(°C)	20.6	20.9	21.4	21.7	21	
Gal.	5	10	12	14	15	
					DRY	
Time (MT)						
EC						
pH						
Temp. (°F)						
(°C)						
Gal.						

After Purging/Before Sample Collection

Depth to Water	21.5	Ft.	Total Well Depth	20.9	Ft.

FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

SITE/JOB GOLDENWEST COLLEGE DATE MAY 20 2010

ADDRESS 9063 RECREATION CIRCLE, FOUNTAIN VALLEY, CA

PERSONNEL EUGENIU GASMAN WEATHER SUNNY

WELL NO. MW 8 EQUIPMENT VAC TRUCK, DISP BAILER

Before Purging

Total Well Depth	20.8	Ft.	Well Diameter	4	Inch.
Depth to Water	8.70	Ft.	Est. Purge Vol.	32	Gal.

Sampling Data

Initial Turbidity 17.2 Final Turbidity

DO ORP

Time (MT)	8.50	8.53	8.55	8.57		
EC						
pH	8.3	8.5	8.4	8.5		
Temp. (°F)						
(°C)	28.3	21.3	20.9	21.0		
Gal.	5	10	15	17 DRY		
Time (MT)						
EC						
pH						
Temp. (°F)						
(°C)						
Gal.						

After Purging/Before Sample Collection

Depth to Water	9.00	Ft.	Total Well Depth	20.8	Ft.

FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

SITE/JOB: GOLDENWEST COLLEGE DATE: MAY 20 2010

ADDRESS: 9063 RECREATION CIRCLE, FOUNTAIN VALLEY, CA

PERSONNEL: EUGENIU GASMAN WEATHER: P. CLOUDY

WELL NO.: MW9 EQUIPMENT: VAC TRUCK

Before Purging

Total Well Depth	20.5	Ft.	Well Diameter	4"	Inch.
Depth to Water	7.70	Ft.	Est. Purge Vol.	34	Gal.

Sampling Data

Initial Turbidity: 169 Final Turbidity: 8.5

DO: ORP:

Time (MT)	7:50	7:55	8:00	8:03	8:06	8:10
EC						
pH	8.7	8.6	8.6	8.6	8.6	8.6
Temp. (°F)						
(°C)	19.4	18.6	18.6	18.00	17.4	17.4
Gal.	5	10	15	16	17	18
						DRY
Time (MT)						
EC						
pH						
Temp. (°F)						
(°C)						
Gal.						

After Purging/Before Sample Collection

Depth to Water	8.52	Ft.	Total Well Depth	20.5	Ft.

FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

SITE/JOB: GOLDENWEST COLLEGE DATE: MAY 20 2010

ADDRESS: 9063 RECREATION CIRCLE, FOUNTAIN VALLEY, CA

PERSONNEL: EUGENIU GASMAN WEATHER: SUNNY

WELL NO.: MW 10 EQUIPMENT: VAC TRUCK, DISP. BAILER

Before Purging

Total Well Depth	20.2	Ft.	Well Diameter	2	Inch.
Depth to Water	7.75	Ft.	Est. Purge Vol.	7	Gal.

Sampling Data

Initial Turbidity: 9.2 Final Turbidity: 8.7

DO: ORP:

Time (MT)	8:40	8:42	8:44	8:46	8:47	
EC						
pH	8.5	8.6	8.6	8.6	8.6	
Temp. (°F)						
(°C)	20.7	20.2	20.2	20.2	20.1	
Gal.	1	2	3	4	5	
					DRY	
Time (MT)						
EC						
pH						
Temp. (°F)						
(°C)						
Gal.						

After Purging/Before Sample Collection

Depth to Water	8.22	Ft.	Total Well Depth	20.2	Ft.

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number: NON-HAZ

2. Page 1 of: 1

3. Emergency Response Phone: (714) 413-4125

4. Waste Tracking Number: DT-13428

5. Generator's Name and Mailing Address: Golden West College
7112 McFADDEN Ave
Huntington Beach, Ca 92605
Generator's Phone: (818) 571-5746

Generator's Site Address (if different than mailing address): Same

6. Transporter 1 Company Name: Able Environmental services
U.S. EPA ID Number: CAR000197349

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address: Crosby & Overton Inc
1630 W. 17th St
Long Beach, Ca 90813
Facility's Phone: (562) 432-5445
U.S. EPA ID Number: CAD028409019

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.
1.	NON-HAZARDOUS waste liquid	001	TT	269	G
2.					
3.					
4.					

13. Special Handling Instructions and Additional Information
Profile # 12485
D31718 L#5531
Wear Protective clothing

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.
Generator's/Offeror's Printed/Typed Name: X EUGENIU GARMAN
Signature:
Month: 5 Day: 20 Year: 10

INTL
15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER
16. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Mike Sanchez
Signature:
Month: 5 Day: 20 Year: 10
Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY
17. Discrepancy
17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
17b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:
17c. Signature of Alternate Facility (or Generator)
Month Day Year

H125.

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a
Printed/Typed Name: Rachel Martinez
Signature:
Month: 05 Day: 26 Year: 10

169-BLS-C 5 11979 (Rev. 8/06)

DESIGNATED FACILITY TO GENERATOR

GROUNDWATER MONITORING PROCEDURES

Required Notifications/Review

1. Prior conducting any field work, the client, regulatory agency, and property owner/manager are notified in writing via facsimile or email. If possible, a minimum of 48 hours notice will be provided prior to conducting the field work.

2. If available, construction details of all wells will be reviewed prior to field work being conducted. This will allow determination in the field of special conditions such as; groundwater levels above or below screened interval.

Water Level/LNAPL Measurements

1. During the groundwater monitoring phase of the fieldwork, all wells are monitored for light non-aqueous phase liquid (LNAPL) using a clear plastic bailer or interface probe. All equipment is cleaned prior to and between locations via a steam cleaner or "three bucket wash" method.

2. Water level is measurements are taken in order from the historically "cleanest" wells to historically "most contaminated" wells.

3. Water levels are measured using an electronic measuring device (±0.01 foot) and are referenced to the surveyed datum (well cover or top of casing). If no survey mark is noted on the well cover, the well is marked with a permanent notch or marker on the north side of the cover for future consistent readings.

4. Recorded measurements include the depth to groundwater, depth to LNAPL and depth to bottom of well.

5. If possible, all wells are gauged on the same day to obtain accurate measurements of the potentiometric surface.

6. If LNAPL is encountered, the potentiometric surface elevation is calculated as:

$$DTWc = DTWm - (Tsph \times SGsph)$$

Where:

DTWc	=	Corrected Depth to Water
DTWm	=	Measured Depth to Water
Tsph	=	Thickness of LNAPL
SGsph	=	Specific Gravity of LNAPL

If SGsph is not known, the following will be assumed:

Gasoline	0.75 g/cm^3
Diesel	0.81 g/cm^3
Jet Fuel (JP-4)	0.79 g/cm^3
#2 Fuel Oil	0.91 g/cm^3
#6 Fuel Oil	0.96 g/cm^3

7. All monitoring data is recorded on field data sheet, reviewed, transferred to a data base and incorporated in the final reporting.

GROUNDWATER SAMPLING PROCEDURES

Wells Exhibiting LNAPL

If a well exhibits measurable LNAPL thickness, sampling will not be conducted. Instead the LNAPL will be bailed from the well to the extent possible within the purging timeframe. Should a groundwater sample be required by the regulatory agency for the project, a sample is collected from the groundwater retained in a bailer lowered below the LNAPL. Wells containing LNAPL will not be purged.

Sample Collection - Purging Method

1. Wells are selected in order of increasing contaminants historically detected.

2. Integrity of the well cover, well cap and top of casing are established and noted for future reference.

3. Non-dedicated equipment is decontaminated using a steam cleaner or "three bucket" wash.

4. Depth to water, depth to LNAPL (if present) and total depth of well are determined using an electronic water level indicator or interface gauging probe in accordance with the monitoring procedures outlined.

5. Generally, well casing volume is calculated for estimating the total minimum purge volume required. The borehole volume will be used, as follows:

$$Bv = 7.48*[\{3.14(Cd/2)^2 + 3.14P[(Bd/2)^2 - (Cd/2)2]\}*(Dw-DTW)]$$

Where:
- Bv = Boring volume in gallons
- 7.48 = gallons per cubic foot
- Cd = casing diameter in feet
- P = porosity of the sand/gravel pack
- Bd = boring diameter in feet
- Dw = depth of the well in feet
- DTW = depth to water

6. Groundwater is removed from the well by bailing or pumping (using a diaphragm, down hole pump or vacuum truck) until it is determined that the well is beginning to dry or until at least four (4) well volumes have been purged and water quality parameters (pH, conductivity, turbidity and temperature) stabilized (within 10 percent of previous reading). When purging via bailing or use of pumps, the purge water is discharged into DOT-approved

55-gallon drums and is stored onsite, temporarily, for subsequent proper disposal by the generator. Disposal methods used by the generator are either off-site disposal by subcontracting a certified waste transporter to remove the stored purge water and properly dispose of the purge water at a recycling facility or use of an on-site groundwater treatment system for the treatment and discharge into either the local storm drain in accordance with an NPDES permit, re-infiltrated in accordance with a WDR permit. If groundwater is removed using a vacuum truck, the vacuum truck will store the purged water and transport it off-site to a waste disposal facility for recycling. Waste manifest will be available once received from the recycling facility.

7. After the well has recovered at least 80 percent or within two hours of purging, a sample is collected just below the water surface using a bailer (teflon, stainless steel or disposable bottom emptying) and placed into laboratory supplied containers. The containers are completely filled and the cap immediately placed over the top and securely tightened. Vials are inverted and tapped to determine if air bubbles are present. Samples are labeled, and placed on ice in an ice chest until delivery to the laboratory.

8. The following equation is used to determine 80 percent recovery:

$$Rdtw = Dw - (WCl \times 0.8)$$

Where:

Rdtw	= Recharge DTW (maximum for 80 % recovery)
Dw	= Depth of well, in feet
DTW	= Depth to water
WCl	= Water column length (TDw – DTW)

Sample Collection – Micro-Purge Method

1. Wells are selected in order of increasing contaminants historically detected.

2. Integrity of the well cover, well cap and top of casing are established and noted for future reference.

3. Non-dedicated equipment is decontaminated using a steam cleaner or "three bucket" wash.

4. Depth to water, depth to LNAPL (if present) and total depth of well are determined using an electronic water level indicator or interface gauging probe in accordance with the monitoring procedures outlined.

5. Groundwater is purged from the wells using a submersible, bladder or other downhole

pump at sufficiently low rates (about 0.05 to 0.5gal/min) of withdrawal that keep drawdown, aeration, and turbulence to a minimal.

6. Generally, the pump intake is positioned in the mid-point of the saturated screened interval, but a different position may be used based on hydrogeologic conditions and/or analyte properties. For petroleum hydrocarbon and oxygenate sample analysis, the pump intake is placed in theupper third of the saturated screened interval. The type of pump, flow rate, total volume of water removed, and depth of the pump intake are noted on the field log. Low-flow purging continues until temperature, pH, turbidity and conductivity stabilize. A sample is then collected from the purge water effluent stream or from a bailer.

7. For low-flow purging, water quality parameters are continuously monitored during purging as opposed to interval monitoring from standard purging. A flow through meter, Horiba 22 or equivalent, is incorporated.

Sample Collection - No Purge Method

1. Integrity of the well cover, well cap and top of casing are established and noted for future reference.

2. Non-dedicated equipment is decontaminated using a steam cleaner or "three bucket" wash.

3. Depth to water, depth to product (if present) and total depth of well are determined using an electronic water level indicator or interface gauging probe (0.01 accuracy).

4. A sample is collected just below the water surface using a bailer (Teflon, stainless steel or disposable, all bottom emptying) and placed into a laboratory supplied vial. The vial is completely filled, cap immediately placed over the top and securely tightened. The vial is inverted and tapped to determine if air bubbles are present. If none, the sample is labeled, and placed on ice in an ice chest until delivery to the laboratory.

Quality Control/Quality Assurance

1. The field data sheet is completed with all pertinent data such as; well integrity, purged water volume, pH, turbidity, temperature, and specific conductance, if available.

2. The samples are transported to the laboratory as soon as possible following chain-of-custody procedures. In the event a holding time of greater than 7 days is required, the laboratory will be requested to supply vials with the appropriate preservatives for the analyses requested.

3. Wells are sampled from the order of least to highest historic concentrations, if known.

4. Site conditions are noted which may potentially contaminate the sample i.e. smoke, vapors from running engines, etc.

5. If a single bailer is used for collection of all samples, an "equipment blank" sample will be collect following the same protocol of sample collection. The same water supply used to rinse the equipment will be used to collect the blank sample.

6. A trip blank, if required, supplied by the analytical laboratory will be stored and transported with the samples until their delivery back to the laboratory.

7. The blank samples will be analyzed for all constituents.

8. A duplicate sample will obtained and analyzed as requested.

Sample Shipment and Chain-of-Custody

Complete records are kept on each sample including sampling date, sample type, location, and other pertinent information. The sample containers are banded and sealed with chain-of-custody seals. The samples are chilled in an ice chest using block or blue ice. Care is ensured not cause sample freezing which may result in container breakage during transport to the laboratory.

Chain-of-Custody procedures, generally described in Test Methods for Evaluating Solid Waste, SW-846, U.S. EPA, 1982, are followed. A chain-of-custody form accompanies the sample from the place of collection to the laboratory, and through the completion of the analytical process. The chain-of-custody form includes project identification information, the sample type and number, the date and time of sampling, the chemical analyses requested, and the identity of the person taking possession at each change of custody.

Equipment Cleaning

When steam-cleaning is not available, the "three bucket" wash is used. The three bucket wash consists of an Alconox® solution cleaning, a tap water rinse and a distilled water rinse. No solvent (hexane) rinses will be used. For bailers, the Alconox® solution is flushed completely through the inside followed by flushing with tap and distilled water. When submersible, bladder or double-diaphragm pumps are used (non-dedicated), the solution of Alconox® is cycled through the pump body and hoses followed by similar water rinses.

Waste Storage and Disposal

The effluent and/or decontamination and/or purge water generated during the testing, equipment cleaning or groundwater sampling are placed in DOT-approved, 55-gallon, drums. The drums are sealed, labeled and stored on site pending subsequent proper disposal/treatment by the generator. As previously mentioned in the Sample Collection-Purge Method section, Disposal methods used by the generator are off-site disposal by contracting a certified waste transporter to remove the stored purge water and properly dispose of the purge water at a recycling facility or use of an on-site groundwater treatment system for the treatment and discharge into the NPDES, WDR or Industrial Waste Discharge permitted storm drains, re-infiltration wells or sewer, respectively. If groundwater is removed using a vacuum truck, the vacuum truck will store the purged water and transport it off-site to a waste disposal facility for recycling. Waste manifest will be available once received from the recycling facility.

APPENDIX G

Alpha Scientific Corporation
Environmental Laboratories

05-27-2010

Mr. Karl Kerner
Atlas Environmental Engineering, Inc.
3185 Airway Avenue, Suite D-1
Costa Mesa, CA 92626

Project: Goldenwest College
Project Site: 15744 Goldenwest Street, Huntington Beach, CA
Sample Date: 05-20-2010
Lab Job No.: R005081

Dear Mr. Kerner:

Enclosed please find the analytical report for the sample(s) received by Alpha Scientific Corporation on 05-20-2010 and analyzed by the following EPA methods:

TPH-Gasoline
EPA 8260B (VOCs & Oxygenates by GC/MS)

All analyses have met the QA/QC criteria of this laboratory.

The sample(s) arrived in good conditions (i.e., chilled, intact) and with a chain of custody record attached.

Alpha Scientific Corporation is certified by CA DHS (Certificate Number 2633). Thank you for giving us the opportunity to serve you. Please feel free to call me at (562) 809-8880 if our laboratory can be of further service to you.

Sincerely,

Roger Wang, Ph.D.
Laboratory Director

Enclosures

This cover letter is an integral part of this analytical report.

05-27-2010

Client:	Atlas Environmental Engineering Inc.	Lab Job No.:	R005081
Project:	Goldenwest College		
Project Site:	15744 Goldenwest Street, Huntington Beach, CA	Date Sampled:	05-20-2010
Matrix:	Water	Date Received:	05-20-2010
Batch No.	BME24-GW1	Date Analyzed:	05-24-2010

TPH-Gasoline by LUFT GC/MS
Reporting Units: µg/L (ppb)

Sample ID	Lab ID	Gasoline Range TPH*	MDL	PQL
Method Blank		ND	50	100
MW-1	R005081-1	ND	50	100
MW-2	R005081-2	ND	50	100
MW-3	R005081-3	340	50	100
MW-4	R005081-4	ND	50	100
MW-5	R005081-5	ND	50	100
MW-6	R005081-6	ND	50	100
MW-7	R005081-7	ND	50	100
MW-8	R005081-8	64J	50	100
MW-9	R005081-9	ND	50	100
MW-10	R005081-10	ND	50	100

* Gasoline Range TPH are petroleum hydrocarbons in the range C4-C12;
MDL: Method Detection Limit;
PQL: Practical Quantitation Limit;
ND: Not Detected (below MDL);
J: Trace value. Result is lower than PQL but higher than MDL.

Client: Atlas Environmental Engineering Inc. Lab Job No.: R005081 Date Reported: 05-27-2010
Project:Goldenwest College Matrix: Water Date Sampled: 05-20-2010

EPA 8260B (VOCs by GC/MS, Page 1 of 2) Reporting Unit: µg/L (ppb)

DATE ANALYZED			05-24	05-24-10	05-24-10	05-24-10	05-24-10	05-24-10
DILUTION FACTOR (DF)			1	1	1	1	1	1
LAB SAMPLE I.D.				R005081-1	R005081-2	R005081-3	R005081-4	R005081-5
CLIENT SAMPLE I.D.				MW-1	MW-2	MW-3	MW-4	MW-5
COMPOUND	MDL	PQL	MB					
Dichlorodifluoromethane	1	5	ND	ND	ND	ND	ND	ND
Chloromethane	1	5	ND	ND	ND	ND	ND	ND
Vinyl Chloride	0.5	1	ND	ND	ND	ND	ND	ND
Bromomethane	1	5	ND	ND	ND	ND	ND	ND
Chloroethane	1	5	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	1	5	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	1	5	ND	ND	ND	ND	ND	ND
Iodomethane	1	5	ND	ND	ND	ND	ND	ND
Methylene Chloride	2	10	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	1	5	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	1	5	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	1	5	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	1	5	ND	ND	ND	10.0	ND	ND
Bromochloromethane	1	5	ND	ND	ND	ND	ND	ND
Chloroform	1	5	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.5	5	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	1	5	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	0.5	5	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	1	5	ND	ND	ND	ND	ND	ND
Benzene	0.5	1	ND	ND	ND	31.0	ND	ND
Trichloroethene	1	2	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	1	5	ND	ND	ND	ND	ND	ND
Bromodichloromethane	1	5	ND	ND	ND	ND	ND	ND
Dibromomethane	1	5	ND	ND	ND	ND	ND	ND
Trans-1,3-Dichloropropene	1	5	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	1	5	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1	5	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.5	5	ND	ND	ND	ND	ND	ND
Dibromochloromethane	1	5	ND	ND	ND	ND	ND	ND
2-Chloroethylvinyl ether	1	10	ND	ND	ND	ND	ND	ND
Bromoform	1	5	ND	ND	ND	ND	ND	ND
Isopropylbenzene	1	5	ND	7.5	ND	9.6	ND	ND
Bromobenzene	1	5	ND	ND	ND	ND	ND	ND

Client: Atlas Environmental Engineering Inc. Lab Job No.: R005081 Date Reported: 05-27-2010
Project:Goldenwest College Matrix: Water Date Sampled: 05-20-2010

EPA 8260B (VOCs by GC/MS, Page 1 of 2) Reporting Unit: µg/L (ppb)

DATE ANALYZED			05-24	05-24-10	05-24-10	05-24-10	05-24-10	05-24-10
DILUTION FACTOR (DF)			1	1	1	1	1	1
LAB SAMPLE I.D.				R005081-6	R005081-7	R005081-8	R005081-9	R005081-10
CLIENT SAMPLE I.D.				MW-6	MW-7	MW-8	MW-9	MW-10
COMPOUND	MDL	PQL	MB					
Dichlorodifluoromethane	1	5	ND	ND	ND	ND	ND	ND
Chloromethane	1	5	ND	ND	ND	ND	ND	ND
Vinyl Chloride	0.5	1	ND	ND	ND	ND	ND	ND
Bromomethane	1	5	ND	ND	ND	ND	ND	ND
Chloroethane	1	5	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	1	5	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	1	5	ND	ND	ND	ND	ND	ND
Iodomethane	1	5	ND	ND	ND	ND	ND	ND
Methylene Chloride	2	10	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	1	5	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	1	5	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	1	5	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	1	5	ND	1.5J	ND	ND	ND	ND
Bromochloromethane	1	5	ND	ND	ND	ND	ND	ND
Chloroform	1	5	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.5	5	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	1	5	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	0.5	5	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	1	5	ND	ND	ND	ND	ND	ND
Benzene	0.5	1	ND	ND	ND	ND	ND	ND
Trichloroethene	1	2	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	1	5	ND	ND	ND	ND	ND	ND
Bromodichloromethane	1	5	ND	ND	ND	ND	ND	ND
Dibromomethane	1	5	ND	ND	ND	ND	ND	ND
Trans-1,3-Dichloropropene	1	5	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	1	5	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1	5	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.5	5	ND	ND	ND	ND	ND	ND
Dibromochloromethane	1	5	ND	ND	ND	ND	ND	ND
2-Chloroethylvinyl ether	1	10	ND	ND	ND	ND	ND	ND
Bromoform	1	5	ND	ND	ND	ND	ND	ND
Isopropylbenzene	1	5	ND	ND	ND	0.8J	ND	ND
Bromobenzene	1	5	ND	ND	ND	ND	ND	ND

Client: Atlas Environmental Engineering Inc. Lab Job No.: R005081 Date Reported: 05-27-2010
Project:Goldenwest College Matrix: Water Date Sampled: 05-20-2010

EPA 8260B (VOCs by GC/MS, Page 2 of 2) Reporting Unit: ppb

COMPOUND	MDL	PQL	MB	MW-1	MW-2	MW-3	MW-4	MW-5
Toluene	0.5	1	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1	2	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane(EDB)	1	5	ND	ND	ND	ND	ND	ND
Chlorobenzene	1	5	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	1	5	ND	ND	ND	ND	ND	ND
Ethylbenzene	0.5	1	ND	ND	ND	0.6J	ND	ND
Total Xylenes	1	2	ND	ND	ND	ND	ND	ND
Styrene	1	5	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	1	5	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	1	5	ND	ND	ND	ND	ND	ND
n-Propylbenzene	1	5	ND	12.0	ND	12.2	ND	ND
2-Chlorotoluene	1	5	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	1	5	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	1	5	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	1	5	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	1	5	ND	ND	ND	ND	ND	ND
Sec-Butylbenzene	1	5	ND	ND	ND	1.3J	ND	ND
1,3-Dichlorobenzene	1	5	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	1	5	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	1	5	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	1	5	ND	ND	ND	ND	ND	ND
n-Butylbenzene	1	5	ND	ND	ND	1.1J	ND	ND
1,2,4-Trichlorobenzene	1	5	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-Chloropropane	1	5	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	1	5	ND	ND	ND	ND	ND	ND
Naphthalene	1	5	ND	ND	ND	ND	6.3	ND
1,2,3-Trichlorobenzene	1	5	ND	ND	ND	ND	ND	ND
Acetone	25	50	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	25	50	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	25	50	ND	ND	ND	ND	ND	ND
2-Hexanone	25	50	ND	ND	ND	ND	ND	ND
Ethanol	250	500	ND	ND	ND	ND	ND	ND
MTBE	1	2	ND	ND	ND	ND	3.4	ND
ETBE	1	2	ND	ND	ND	ND	ND	ND
DIPE	1	2	ND	ND	ND	ND	ND	ND
TAME	1	2	ND	ND	ND	ND	ND	ND
T-Butyl Alcohol	10	20	ND	ND	ND	ND	94.4	ND

MB=Method Blank; MDL=Method Detection Limit; PQL=Practical Quantitation Limit; ND=Not Detected (below DF × MDL). * Result from a higher dilution analysis. J=Result is between DF × MDL & DF × PQL.

Client: Atlas Environmental Engineering Inc. Lab Job No.: R005081 Date Reported: 05-27-2010
Project:Goldenwest College Matrix: Water Date Sampled: 05-20-2010

EPA 8260B (VOCs by GC/MS, Page 2 of 2) Reporting Unit: ppb

COMPOUND	MDL	PQL	MB	MW-6	MW-7	MW-8	MW-9	MW-10
Toluene	0.5	1	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1	2	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane(EDB)	1	5	ND	ND	ND	ND	ND	ND
Chlorobenzene	1	5	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	1	5	ND	ND	ND	ND	ND	ND
Ethylbenzene	0.5	1	ND	ND	ND	ND	ND	ND
Total Xylenes	1	2	ND	ND	ND	ND	ND	ND
Styrene	1	5	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	1	5	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	1	5	ND	ND	ND	ND	ND	ND
n-Propylbenzene	1	5	ND	ND	ND	1.0J	ND	ND
2-Chlorotoluene	1	5	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	1	5	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	1	5	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	1	5	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	1	5	ND	ND	ND	ND	ND	ND
Sec-Butylbenzene	1	5	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	1	5	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	1	5	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	1	5	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	1	5	ND	ND	ND	ND	ND	ND
n-Butylbenzene	1	5	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	1	5	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-Chloropropane	1	5	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	1	5	ND	ND	ND	ND	ND	ND
Naphthalene	1	5	ND	ND	ND	1.1J	ND	ND
1,2,3-Trichlorobenzene	1	5	ND	ND	ND	ND	ND	ND
Acetone	25	50	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	25	50	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	25	50	ND	ND	ND	ND	ND	ND
2-Hexanone	25	50	ND	ND	ND	ND	ND	ND
Ethanol	250	500	ND	ND	ND	ND	ND	ND
MTBE	1	2	ND	ND	ND	1.2J	ND	ND
ETBE	1	2	ND	ND	ND	ND	ND	ND
DIPE	1	2	ND	ND	ND	ND	ND	ND
TAME	1	2	ND	ND	ND	ND	ND	ND
T-Butyl Alcohol	10	20	ND	ND	ND	ND	ND	ND

MB=Method Blank; MDL=Method Detection Limit; PQL=Practical Quantitation Limit; ND=Not Detected (below DF × MDL). * Result from a higher dilution analysis. J=Result is between DF × MDL & DF × PQL.

05-27-2010

TPH-Gasoline
Batch QA/QC Report

Client:	Atlas Environmental Engineering, Inc.	Lab Job No.:	R005081
Project:	Goldenwest College		
Matrix:	Water	Lab Sample ID:	G005096-1
Batch No.:	BME24-GW1	Date Analyzed:	05-24-2010

I. MS/MSD Report
Unit: ppb

Analyte	Sample Conc.	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
TPH-g	ND	1,000	953	846	95.3	84.6	11.9	30	70-130

II. LCS Result
Unit: ppb

Analyte	LCS Report Value	True Value	Rec.%	%Rec Accept. Limit
TPH-g	863	1,000	86.3	80-120

ND: Not Detected (at the specified limit).

05-27-2010

EPA 8260B
Batch QA/QC Report

Client:	Atlas Environmental Engineering, Inc.	Lab Job No.:	R005081
Project:	Goldenwest College		
Matrix:	Water	Lab Sample ID:	G005096-1
Batch No:	0524-VOBW1	Date Analyzed:	05-24-2010

I. MS/MSD Report
Unit: ppb

Compound	Sample Conc.	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
1,1-Dichloroethene	ND	20	19.5	19.2	97.5	96.0	1.6	30	70-130
Benzene	ND	20	19.9	18.5	99.5	92.5	7.3	30	70-130
Trichloro-ethene	ND	20	18.4	20.4	92.0	102.0	10.3	30	70-130
Toluene	ND	20	20.6	19.4	103.0	97.0	6.0	30	70-130
Chlorobenzene	ND	20	18.2	22.1	91.0	110.5	19.4	30	70-130

II. LCS Result
Unit: ppb

Compound	LCS Report Value	True Value	Rec.%	Accept. Limit
1,1-Dichloroethene	23.4	20.0	117.0	80-120
Benzene	19.7	20.0	98.5	80-120
Trichloro-ethene	23.6	20.0	118.0	80-120
Toluene	22.0	20.0	110.0	80-120
Chlorobenzene	22.3	20.0	111.5	80-120

ND: Not Detected (at the specified limit)

R005081

ATLAS ENVIRONMENTAL ENGINEERING, INC. — CHAIN OF CUSTODY FORM

P.O. NUMBER:	SITE/PROJECT NAME:
GWC	GOLGENWEST COLLEGE
JOB NUMBER:	SITE/PROJECT LOCATION:
GWC-Q2 EG	15744 GOLDENWEST STREET HUNTINGTON BEACH, CALIFORNIA

SAMPLER(S) SIGNATURE:

QUARTERLY WATER SAMPLING

ANALYTICAL METHOD

SUBMIT RESULTS TO:

ATLAS ENVIRONMENTAL ENG.
3185 AIRWAY AVE, SUITE D-1
COSTA MESA , CALIFORNIA 92626

ATTN: KARL KERNER
PHONE NO. (714) 890-7129
FAX NO. (714) 890-7149

SAMPLE NUMBER (I.D.)	YEAR 2009 DATE MM/DD	TIME AM/PM	DEPTH BELOW GRADE (ft)	NO. OF CONTAINERS	TPHg 8015M	BTEX + Oxygenates 8260B MTBE ETBE TAME DIPE TBA			Lab ID	REMARKS
MW-1	5/20	10:25		2V	X		X		R005081-1	
MW-2	5/20	8:30		2V	X		X		-2	
MW-3	5/20	9:25		2V	X		X		-3	
MW-4	5/20	9:55		2V	X		X		-4	
MW-5	5/20	9:40		2V	X		X		-5	
MW-6	5/20	10:50		2V	X		X		-6	
MW-7	5/20	10:15		2V	X		X		-7	
MW-8	5/20	8:55		2V	X		X		-8	
MW-9	5/20	8:10		2V	X		X		-9	
MW-10	5/20	8:45		2V	X		X		-10	

SAMPLES INTACT: YES..✓..... NO.....
SAMPLES PROPERLY COOLED: YES..✓..... NO.....
TEMPERATURE STORED: 4°C
PRESERVATIVES ADDED: YES..✓..... NO..... TYPE: HCl
SAMPLES ACCEPTED: YES..✓..... NO.....
IF NOT, WHY: _____

SAMPLES PLACED IN LAB REFRIGERATOR
YES..✓..... NO..... REP. INITIALS..RM..

LABORATORY NAME: ASC

RELINQUISHED	DATE/TIME	DATE/TIME	RECEIVED
RELINQUISHED BY (SIGNATURE)/COMPANY:	DATE/TIME 5/20/10 13:00	DATE/TIME 5/20/10 13:00	RECEIVED BY (SIGNATURE)/COMPANY: ASC
RELINQUISHED BY (SIGNATURE)/COMPANY:	DATE/TIME	DATE/TIME	RECEIVED BY (SIGNATURE)/COMPANY:
RELINQUISHED BY (SIGNATURE)/COMPANY:	DATE/TIME	DATE/TIME	RECEIVED BY (SIGNATURE)/COMPANY:

Alpha Scientific Corporation
Environmental Laboratories

06-01-2010

Mr. Karl Kerner
Atlas Environmental Engineering, Inc.
3185 Airway Avenue, Suite D-1
Costa Mesa, CA 92626

Project: Goldenwest College
Project Site: 15744 Goldenwest St., Huntington Beach, CA.
Sample Date: 05-25-2010
Lab Job No.: R005102

Dear Mr. Kerner:

Enclosed please find the analytical report for the sample(s) received by Alpha Scientific Corporation on 05-25-2010 and analyzed by the following EPA methods:

EPA 8015M (Total Petroleum Hydrocarbons)
EPA 8260B (VOCs & Oxygenates by GC/MS)

All analyses have met the QA/QC criteria of this laboratory.

The sample(s) arrived in good conditions (i.e., chilled, intact) and with a chain of custody record attached.

Alpha Scientific Corporation is a CA DHS certified laboratory (Certificate Number 2633). Thank you for giving us the opportunity to serve you. Please feel free to call me at (562) 809-8880 if our laboratory can be of further service to you.

Sincerely,

Roger Wang, Ph. D.
Laboratory Director

Enclosures

This cover letter is an integral part of this analytical report.

Client:	Atlas Environmental Engineering, Inc.	Lab Job No.:	R005102
Project:	Goldenwest College		
Project Site:	15744 Goldenwest St., Huntington Beach, CA.	Date Sampled:	05-25-2010
Matrix:	Water	Date Received:	05-25-2010
Batch No. for TPH-g:	EME26-GW1	Date Analyzed:	05-27-2010
Batch No for TPH-d:	BE28-DW1	Date Analyzed:	05-28-2010
		Date Reported:	06-01-2010

EPA 8015M (Total Petroleum Hydrocarbons)
Reporting Units: ug/L (ppb)

Sample ID	Lab ID	Gasoline Range (C4-C12)*	Diesel Range (C13-C23)	Oil Range (C24-C40)
MDL		50	500	2500
PQL		100	750	4000
Method Blank		ND	ND	ND
VB1	R005102-29	94J	ND	ND

* Gasoline Range TPH result is obtained from purge and trap analysis using LUFT GC/MS Method
MDL: Method Detection Limit.
PQL: Practical Quantitation Limit.
ND: Not Detected (at the specified limit).
J: Trace value

Client: Atlas Environmental Engineering Inc. Lab Job No.: R005102 Date Reported: 06-01-2010
Project:Goldenwest College Matrix: Water Date Sampled: 05-25-2010

EPA 8260B (VOCs by GC/MS, Page 1 of 2) Reporting Unit: µg/L (ppb)

DATE ANALYZED			05-27-10	05-27-10			
DILUTION FACTOR (DF)			1	1			
LAB SAMPLE I.D.				R005102-29			
CLIENT SAMPLE I.D.				VB1			
COMPOUND	**MDL**	**PQL**	MB				
Dichlorodifluoromethane	1	5	ND	ND			
Chloromethane	1	5	ND	ND			
Vinyl Chloride	0.5	1	ND	ND			
Bromomethane	1	5	ND	ND			
Chloroethane	1	5	ND	ND			
Trichlorofluoromethane	1	5	ND	ND			
1,1-Dichloroethene	1	5	ND	ND			
Iodomethane	1	5	ND	ND			
Methylene Chloride	2	10	ND	ND			
trans-1,2-Dichloroethene	1	5	ND	ND			
1,1-Dichloroethane	1	5	ND	ND			
2,2-Dichloropropane	1	5	ND	ND			
cis-1,2-Dichloroethene	1	5	ND	ND			
Bromochloromethane	1	5	ND	ND			
Chloroform	1	5	ND	ND			
1,2-Dichloroethane	0.5	5	ND	ND			
1,1,1-Trichloroethane	1	5	ND	ND			
Carbon tetrachloride	0.5	5	ND	ND			
1,1-Dichloropropene	1	5	ND	ND			
Benzene	0.5	1	ND	ND			
Trichloroethene	1	2	ND	ND			
1,2-Dichloropropane	1	5	ND	ND			
Bromodichloromethane	1	5	ND	ND			
Dibromomethane	1	5	ND	ND			
Trans-1,3-Dichloropropene	1	5	ND	ND			
cis-1,3-Dichloropropene	1	5	ND	ND			
1,1,2-Trichloroethane	1	5	ND	ND			
1,3-Dichloropropane	0.5	5	ND	ND			
Dibromochloromethane	1	5	ND	ND			
2-Chloroethylvinyl ether	1	10	ND	ND			
Bromoform	1	5	ND	ND			
Isopropylbenzene	1	5	ND	2.1J			
Bromobenzene	1	5	ND	ND			

Client: Atlas Environmental Engineering Inc. Lab Job No.: R005102 Date Reported: 06-01-2010
Project:Goldenwest College Matrix: Water Date Sampled: 05-25-2010

EPA 8260B (VOCs by GC/MS, Page 2 of 2) Reporting Unit: ppb

COMPOUND	MDL	PQL	MB	VB1			
Toluene	0.5	1	ND	ND			
Tetrachloroethene	1	2	ND	ND			
1,2-Dibromoethane(EDB)	1	5	ND	ND			
Chlorobenzene	1	5	ND	ND			
1,1,1,2-Tetrachloroethane	1	5	ND	ND			
Ethylbenzene	0.5	1	ND	10.0			
Total Xylenes	1	2	ND	ND			
Styrene	1	5	ND	ND			
1,1,2,2-Tetrachloroethane	1	5	ND	ND			
1,2,3-Trichloropropane	1	5	ND	ND			
n-Propylbenzene	1	5	ND	6.3			
2-Chlorotoluene	1	5	ND	ND			
4-Chlorotoluene	1	5	ND	ND			
1,3,5-Trimethylbenzene	1	5	ND	2.4J			
tert-Butylbenzene	1	5	ND	ND			
1,2,4-Trimethylbenzene	1	5	ND	12.1			
Sec-Butylbenzene	1	5	ND	ND			
1,3-Dichlorobenzene	1	5	ND	ND			
p-Isopropyltoluene	1	5	ND	ND			
1,4-Dichlorobenzene	1	5	ND	ND			
1,2-Dichlorobenzene	1	5	ND	ND			
n-Butylbenzene	1	5	ND	1.6J			
1,2,4-Trichlorobenzene	1	5	ND	ND			
1,2-Dibromo-3-Chloropropane	1	5	ND	ND			
Hexachlorobutadiene	1	5	ND	ND			
Naphthalene	1	5	ND	2.2J			
1,2,3-Trichlorobenzene	1	5	ND	ND			
Acetone	25	50	ND	ND			
2-Butanone (MEK)	25	50	ND	ND			
4-Methyl-2-pentanone (MIBK)	25	50	ND	ND			
2-Hexanone	25	50	ND	ND			
Ethanol	250	500	ND	ND			
MTBE	1	2	ND	ND			
ETBE	1	2	ND	ND			
DIPE	1	2	ND	1.1J			
TAME	1	2	ND	ND			
T-Butyl Alcohol	10	20	ND	ND			

MB=Method Blank; MDL=Method Detection Limit; PQL=Practical Quantitation Limit; ND=Not Detected (below DF × MDL). * Result from a higher dilution analysis. J=Result is between DF × MDL & DF × PQL.

Client: Atlas Environmental Engineering, Inc.
Project: Goldenwest College
Project Site: 15744 Goldenwest St., Huntington Beach, CA.
Matrix: Soil
Batch No. for TPH-g: BME25-GS2
Prepared Method for TPH-d & o:EPA 3550B
Batch No. for TPH-d & o: BE26-DS2

Lab Job No.: R005102

Date Sampled: 05-25-2010
Date Received: 05-25-2010
Date Analyzed: 05-25/26-2010
Date Prepared: 05-26-2010
Date Analyzed: 05-27-2010
Date Reported: 06-01-2010

EPA 8015M (Total Petroleum Hydrocarbons)
Reporting Units: mg/kg (ppm)

Sample ID	Lab ID	Gasoline Range (C4-C12)*	Diesel Range (C13-C23)	Oil Range (C14-C40)
MDL		0.2	5	25
PQL		0.5	10	50
Method Blank		ND	ND	ND
VB1-15	R005102-1	0.8	ND	ND
VB1-20	R005102-2	ND	ND	ND
VB1-25	R005102-3	ND	ND	ND
VB1-30	R005102-4	ND	ND	ND
VB2-5	R005102-5	ND	ND	ND
VB2-10	R005102-6	ND	ND	ND
VB2-15	R005102-7	ND	ND	ND
VB2-20	R005102-8	ND	ND	ND
VB2-25	R005102-9	ND	ND	ND
VB2-30	R005102-10	ND	ND	ND
VB3-5	R005102-11	ND	ND	ND
VB3-10	R005102-12	104	9.6J	ND
VB3-15	R005102-13	ND	ND	ND
VB3-20	R005102-14	ND	ND	ND
VB3-25	R005102-15	ND	ND	ND
VB3-30	R005102-16	ND	ND	ND

* Gasoline Range TPH result is obtained from purge and trap analysis using LUFT-GCMS Method;
MDL: Method Detection Limit; PQL: Practical Quantitation Limit;
ND: Not Detected (below MDL); J: Trace Value.

Client: Atlas Environmental Engineering, Inc.
Project: Goldenwest College
Project Site: 15744 Goldenwest St., Huntington Beach, CA.
Matrix: Soil
Batch No. for TPH-g: BME25-GS2
CME26-GS1
Prepared Method for TPH-d & o: EPA 3550B
Batch No. for TPH-d & o: BE26-DS2/BE28-DS1

Lab Job No.: R005102

Date Sampled: 05-25-2010
Date Received: 05-25-2010
Date Analyzed: 05-26-2010
05-26-2010
Date Prepared: 05-26-2010
Date Analyzed: 05-27/29-2010
Date Reported: 06-01-2010

EPA 8015M (Total Petroleum Hydrocarbons)
Reporting Units: mg/kg (ppm)

Sample ID	Lab ID	Gasoline Range (C4-C12)*	Diesel Range (C13-C23)	Oil Range (C14-C40)
MDL		0.2	5	25
PQL		0.5	10	50
Method Blank		ND	ND	ND
VB4-5	R005102-17	ND	ND	ND
VB4-10	R005102-18	ND	ND	ND
VB4-15	R005102-19	ND	ND	ND
VB4-20	R005102-20	ND	ND	ND
VB4-25	R005102-21	ND	ND	ND
VB4-30	R005102-22	ND	ND	ND
VB5-5	R005102-23	ND	ND	ND
VB5-10	R005102-24	ND	ND	ND
VB5-15	R005102-25	6.8	ND	ND
VB5-20	R005102-26	ND	ND	ND
VB5-25	R005102-27	ND	ND	ND
VB5-30	R005102-28	ND	ND	ND

* Gasoline Range TPH result is obtained from purge and trap analysis using LUFT-GCMS Method;
MDL: Method Detection Limit; PQL: Practical Quantitation Limit;
ND: Not Detected (below MDL); J: Trace Value.

Client: Atlas Environmental Engineering Inc. Lab Job No.: R005102 Date Reported: 06-01-2010
Project:Goldenwest College Matrix: Soil Date Sampled: 05-25-2010

EPA 8260B (VOCs & Oxygenates by GC/MS, Page 2 of 2)
Reporting Unit: mg/kg(ppm)

COMPOUND	MDL	PQL	MB	VB1-15	VB1-20	VB1-25	VB1-30	VB2-5
1,2-Dibromoethane(EDB)	0.002	0.005	ND	ND	ND	ND	ND	ND
Chlorobenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Ethylbenzene	0.001	0.002	ND	ND	ND	ND	ND	ND
Total Xylenes	0.002	0.004	ND	ND	ND	ND	ND	ND
Styrene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.002	0.005	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	0.002	0.005	ND	ND	ND	ND	ND	ND
n-Propylbenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	0.002	0.005	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
Sec-Butylbenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
n-Butylbenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-Chloropropane	0.002	0.005	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	0.002	0.005	ND	ND	ND	ND	ND	ND
Naphthalene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
Acetone	0.050	0.100	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	0.035	0.050	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	0.035	0.050	ND	ND	ND	ND	ND	ND
2-Hexanone	0.035	0.050	ND	ND	ND	ND	ND	ND
Ethanol	0.50	1.00	ND	ND	ND	ND	ND	ND
MTBE	0.002	0.005	ND	ND	ND	ND	ND	ND
ETBE	0.002	0.005	ND	ND	ND	ND	ND	ND
DIPE	0.002	0.005	ND	ND	ND	ND	ND	ND
TAME	0.002	0.005	ND	ND	ND	ND	ND	ND
T-Butyl Alcohol	0.020	0.050	ND	ND	ND	ND	ND	ND

MDL=Method Detection Limit; PQL=Practical Quantification Limit; MB=Method Blank;
ND=Not Detected (below DF × MDL); * Obtained from a higher dilution analysis; J:Trace value.

Client: Atlas Environmental Engineering Inc. Lab Job No.: R005102 Date Reported: 06-01-2010
Project:Goldenwest College Matrix: Soil Date Sampled: 05-25-2010

EPA 8260B (VOCs & Oxygenates by GC/MS, Page 2 of 2)
Reporting Unit: mg/kg(ppm)

COMPOUND	MDL	PQL	MB	VB2-10	VB2-15	VB2-20	VB2-25	VB2-30
1,2-Dibromoethane(EDB)	0.002	0.005	ND	ND	ND	ND	ND	ND
Chlorobenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Ethylbenzene	0.001	0.002	ND	ND	ND	ND	ND	ND
Total Xylenes	0.002	0.004	ND	ND	ND	ND	ND	ND
Styrene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.002	0.005	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	0.002	0.005	ND	ND	ND	ND	ND	ND
n-Propylbenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	0.002	0.005	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
Sec-Butylbenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
n-Butylbenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-Chloropropane	0.002	0.005	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	0.002	0.005	ND	ND	ND	ND	ND	ND
Naphthalene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
Acetone	0.050	0.100	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	0.035	0.050	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	0.035	0.050	ND	ND	ND	ND	ND	ND
2-Hexanone	0.035	0.050	ND	ND	ND	ND	ND	ND
Ethanol	0.50	1.00	ND	ND	ND	ND	ND	ND
MTBE	0.002	0.005	ND	ND	ND	ND	ND	ND
ETBE	0.002	0.005	ND	ND	ND	ND	ND	ND
DIPE	0.002	0.005	ND	ND	ND	ND	ND	ND
TAME	0.002	0.005	ND	ND	ND	ND	ND	ND
T-Butyl Alcohol	0.020	0.050	ND	ND	ND	ND	ND	ND

MDL=Method Detection Limit; PQL=Practical Quantification Limit; MB=Method Blank;
ND=Not Detected (below DF × MDL); * Obtained from a higher dilution analysis; J:Trace value.

Client: Atlas Environmental Engineering Inc. Lab Job No.: R005102 Date Reported: 06-01-2010
Project:Goldenwest College Matrix: Soil Date Sampled: 05-25-2010

EPA 8260B (VOCs & Oxygenates by GC/MS, Page 2 of 2)
Reporting Unit: mg/kg(ppm)

COMPOUND	MDL	PQL	MB	VB3-5	VB3-10	VB3-15	VB3-20	VB3-25
1,2-Dibromoethane(EDB)	0.002	0.005	ND	ND	ND	ND	ND	ND
Chlorobenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Ethylbenzene	0.001	0.002	ND	ND	2.46	ND	ND	ND
Total Xylenes	0.002	0.004	ND	ND	ND	ND	ND	ND
Styrene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.002	0.005	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	0.002	0.005	ND	ND	ND	ND	ND	ND
n-Propylbenzene	0.002	0.005	ND	ND	2.15	ND	ND	ND
2-Chlorotoluene	0.002	0.005	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	0.002	0.005	ND	ND	0.448	ND	ND	ND
tert-Butylbenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	0.002	0.005	ND	ND	1.54	ND	ND	ND
Sec-Butylbenzene	0.002	0.005	ND	ND	0.293	ND	ND	ND
1,3-Dichlorobenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
n-Butylbenzene	0.002	0.005	ND	ND	0.509	ND	ND	ND
1,2,4-Trichlorobenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-Chloropropane	0.002	0.005	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	0.002	0.005	ND	ND	ND	ND	ND	ND
Naphthalene	0.002	0.005	ND	ND	2.60	ND	ND	ND
1,2,3-Trichlorobenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
Acetone	0.050	0.100	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	0.035	0.050	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	0.035	0.050	ND	ND	ND	ND	ND	ND
2-Hexanone	0.035	0.050	ND	ND	ND	ND	ND	ND
Ethanol	0.50	1.00	ND	ND	ND	ND	ND	ND
MTBE	0.002	0.005	ND	ND	0.425J	ND	ND	0.002J
ETBE	0.002	0.005	ND	ND	ND	ND	ND	ND
DIPE	0.002	0.005	ND	ND	ND	ND	ND	ND
TAME	0.002	0.005	ND	ND	ND	ND	ND	ND
T-Butyl Alcohol	0.020	0.050	ND	ND	ND	0.184	ND	ND

MDL=Method Detection Limit; PQL=Practical Quantification Limit; MB=Method Blank;
ND=Not Detected (below DF × MDL); * Obtained from a higher dilution analysis; J:Trace value.

Client: Atlas Environmental Engineering Inc. Lab Job No.: R005102 Date Reported: 06-01-2010
Project:Goldenwest College Matrix: Soil Date Sampled: 05-25-2010

EPA 8260B (VOCs & Oxygenates by GC/MS, Page 2 of 2)
Reporting Unit: mg/kg(ppm)

COMPOUND	MDL	PQL	MB	VB3-30	VB4-5	VB4-10	VB4-15	VB4-20
1,2-Dibromoethane(EDB)	0.002	0.005	ND	ND	ND	ND	ND	ND
Chlorobenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Ethylbenzene	0.001	0.002	ND	ND	ND	ND	ND	ND
Total Xylenes	0.002	0.004	ND	ND	ND	ND	ND	ND
Styrene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.002	0.005	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	0.002	0.005	ND	ND	ND	ND	ND	ND
n-Propylbenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	0.002	0.005	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
Sec-Butylbenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
n-Butylbenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	0.002	0.005	ND	ND	ND	ND	4.8J	ND
1,2-Dibromo-3-Chloropropane	0.002	0.005	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	0.002	0.005	ND	ND	ND	ND	ND	ND
Naphthalene	0.002	0.005	ND	ND	ND	ND	6.5	ND
1,2,3-Trichlorobenzene	0.002	0.005	ND	ND	ND	ND	6.2	ND
Acetone	0.050	0.100	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	0.035	0.050	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	0.035	0.050	ND	ND	ND	ND	ND	ND
2-Hexanone	0.035	0.050	ND	ND	ND	ND	ND	ND
Ethanol	0.50	1.00	ND	ND	ND	ND	ND	ND
MTBE	0.002	0.005	ND	ND	ND	ND	ND	ND
ETBE	0.002	0.005	ND	ND	ND	ND	ND	ND
DIPE	0.002	0.005	ND	ND	ND	ND	ND	ND
TAME	0.002	0.005	ND	ND	ND	ND	ND	ND
T-Butyl Alcohol	0.020	0.050	ND	ND	ND	ND	ND	ND

MDL=Method Detection Limit; PQL=Practical Quantification Limit; MB=Method Blank;
ND=Not Detected (below DF × MDL); * Obtained from a higher dilution analysis; J:Trace value.

Client: Atlas Environmental Engineering Inc. Lab Job No.: R005102 Date Reported: 06-01-2010
Project:Goldenwest College Matrix: Soil Date Sampled: 05-25-2010

EPA 8260B (VOCs & Oxygenates by GC/MS, Page 2 of 2)
Reporting Unit: mg/kg(ppm)

COMPOUND	MDL	PQL	MB	VB4-25	VB4-30	VB5-5	VB5-10	VB5-15
1,2-Dibromoethane(EDB)	0.002	0.005	ND	ND	ND	ND	ND	ND
Chlorobenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Ethylbenzene	0.001	0.002	ND	ND	ND	ND	ND	ND
Total Xylenes	0.002	0.004	ND	ND	ND	ND	ND	ND
Styrene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.002	0.005	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	0.002	0.005	ND	ND	ND	ND	ND	ND
n-Propylbenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	0.002	0.005	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
Sec-Butylbenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
n-Butylbenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-Chloropropane	0.002	0.005	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	0.002	0.005	ND	ND	ND	ND	ND	ND
Naphthalene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
Acetone	0.050	0.100	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	0.035	0.050	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	0.035	0.050	ND	ND	ND	ND	ND	ND
2-Hexanone	0.035	0.050	ND	ND	ND	ND	ND	ND
Ethanol	0.50	1.00	ND	ND	ND	ND	ND	ND
MTBE	0.002	0.005	ND	ND	ND	ND	ND	ND
ETBE	0.002	0.005	ND	ND	ND	ND	ND	ND
DIPE	0.002	0.005	ND	ND	ND	ND	ND	ND
TAME	0.002	0.005	ND	ND	ND	ND	ND	ND
T-Butyl Alcohol	0.020	0.050	ND	ND	ND	ND	ND	ND

MDL=Method Detection Limit; PQL=Practical Quantification Limit; MB=Method Blank;
ND=Not Detected (below DF × MDL); * Obtained from a higher dilution analysis; J:Trace value.

Client: Atlas Environmental Engineering Inc. Lab Job No.: R005102 Date Reported: 06-01-2010
Project:Goldenwest College Matrix: Soil Date Sampled: 05-25-2010

EPA 8260B (VOCs & Oxygenates by GC/MS, Page 2 of 2)
Reporting Unit: mg/kg(ppm)

COMPOUND	MDL	PQL	MB	VB5-20	VB5-25	VB5-30		
1,2-Dibromoethane(EDB)	0.002	0.005	ND	ND	ND	ND		
Chlorobenzene	0.002	0.005	ND	ND	ND	ND		
1,1,1,2-Tetrachloroethane	0.002	0.005	ND	ND	ND	ND		
Ethylbenzene	0.001	0.002	ND	ND	ND	ND		
Total Xylenes	0.002	0.004	ND	ND	ND	ND		
Styrene	0.002	0.005	ND	ND	ND	ND		
1,1,2,2-Tetrachloroethane	0.002	0.005	ND	ND	ND	ND		
1,2,3-Trichloropropane	0.002	0.005	ND	ND	ND	ND		
n-Propylbenzene	0.002	0.005	ND	ND	ND	ND		
2-Chlorotoluene	0.002	0.005	ND	ND	ND	ND		
4-Chlorotoluene	0.002	0.005	ND	ND	ND	ND		
1,3,5-Trimethylbenzene	0.002	0.005	ND	ND	ND	ND		
tert-Butylbenzene	0.002	0.005	ND	ND	ND	ND		
1,2,4-Trimethylbenzene	0.002	0.005	ND	ND	ND	ND		
Sec-Butylbenzene	0.002	0.005	ND	ND	ND	ND		
1,3-Dichlorobenzene	0.002	0.005	ND	ND	ND	ND		
p-Isopropyltoluene	0.002	0.005	ND	ND	ND	ND		
1,4-Dichlorobenzene	0.002	0.005	ND	ND	ND	ND		
1,2-Dichlorobenzene	0.002	0.005	ND	ND	ND	ND		
n-Butylbenzene	0.002	0.005	ND	ND	ND	ND		
1,2,4-Trichlorobenzene	0.002	0.005	ND	ND	ND	ND		
1,2-Dibromo-3-Chloropropane	0.002	0.005	ND	ND	ND	ND		
Hexachlorobutadiene	0.002	0.005	ND	ND	ND	ND		
Naphthalene	0.002	0.005	ND	ND	ND	ND		
1,2,3-Trichlorobenzene	0.002	0.005	ND	ND	ND	ND		
Acetone	0.050	0.100	ND	ND	ND	ND		
2-Butanone (MEK)	0.035	0.050	ND	ND	ND	ND		
4-Methyl-2-pentanone (MIBK)	0.035	0.050	ND	ND	ND	ND		
2-Hexanone	0.035	0.050	ND	ND	ND	ND		
Ethanol	0.50	1.00	ND	ND	ND	ND		
MTBE	0.002	0.005	ND	ND	ND	ND		
ETBE	0.002	0.005	ND	ND	ND	ND		
DIPE	0.002	0.005	ND	ND	ND	ND		
TAME	0.002	0.005	ND	ND	ND	ND		
T-Butyl Alcohol	0.020	0.050	ND	ND	ND	ND		

MDL=Method Detection Limit; PQL=Practical Quantification Limit; MB=Method Blank;
ND=Not Detected (below DF × MDL); * Obtained from a higher dilution analysis; J:Trace value.

Client: Atlas Environmental Engineering Inc. Lab Job No.: R005102 Date Reported: 06-01-2010
Project:Goldenwest College Matrix: Soil Date Sampled: 05-25-2010

EPA 8260B (VOCs by GC/MS, Page 1 of 2)
Reporting Unit: mg/kg(ppm)

DATE ANALYZED			05-25	05-25-10	05-25-10	05-25-10	05-25-10	05-25-10
DILUTION FACTOR (DF)			1	1	1	1	1	1
LAB SAMPLE I.D.				R005102-1	R005102-2	R005102-3	R005102-4	R005102-5
CLIENT SAMPLE I.D.				VB1-15	VB1-20	VB1-25	VB1-30	VB2-5
COMPOUND	MDL	PQL	MB					
Dichlorodifluoromethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Chloromethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Vinyl Chloride	0.001	0.002	ND	ND	ND	ND	ND	ND
Bromomethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Chloroethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	0.002	0.005	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.002	0.005	ND	ND	ND	ND	ND	ND
Iodomethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Methylene Chloride	0.005	0.010	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.002	0.005	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	0.002	0.005	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	0.002	0.005	ND	ND	ND	ND	ND	ND
Bromochloromethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Chloroform	0.002	0.005	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.001	0.005	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	0.001	0.005	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	0.002	0.005	ND	ND	ND	ND	ND	ND
Benzene	0.001	0.002	ND	ND	ND	ND	ND	ND
Trichloroethene	0.002	0.004	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	0.002	0.005	ND	ND	ND	ND	ND	ND
Bromodichloromethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Dibromomethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Trans-1,3-Dichloropropene	0.002	0.005	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	0.002	0.005	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.001	0.005	ND	ND	ND	ND	ND	ND
Dibromochloromethane	0.002	0.005	ND	ND	ND	ND	ND	ND
2-Chloroethylvinyl ether	0.002	0.010	ND	ND	ND	ND	ND	ND
Bromoform	0.002	0.005	ND	ND	ND	ND	ND	ND
Isopropylbenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
Bromobenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
Toluene	0.001	0.002	ND	ND	ND	ND	ND	ND
Tetrachloroethene	0.002	0.004	ND	ND	ND	ND	ND	ND

Client: Atlas Environmental Engineering Inc. Lab Job No.: R005102 Date Reported: 06-01-2010
Project:Goldenwest College Matrix: Soil Date Sampled: 05-25-2010

EPA 8260B (VOCs by GC/MS, Page 1 of 2)
Reporting Unit: mg/kg(ppm)

DATE ANALYZED			05-25	05-26-10	05-26-10	05-26-10	05-26-10	05-26-10
DILUTION FACTOR (DF)			1	1	1	1	1	1
LAB SAMPLE I.D.				R005102-6	R005102-7	R005102-8	R005102-9	R005102-10
CLIENT SAMPLE I.D.				VB2-10	VB2-15	VB2-20	VB2-25	VB2-30
COMPOUND	**MDL**	**PQL**	MB					
Dichlorodifluoromethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Chloromethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Vinyl Chloride	0.001	0.002	ND	ND	ND	ND	ND	ND
Bromomethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Chloroethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	0.002	0.005	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.002	0.005	ND	ND	ND	ND	ND	ND
Iodomethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Methylene Chloride	0.005	0.010	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.002	0.005	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	0.002	0.005	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	0.002	0.005	ND	ND	ND	ND	ND	ND
Bromochloromethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Chloroform	0.002	0.005	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.001	0.005	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	0.001	0.005	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	0.002	0.005	ND	ND	ND	ND	ND	ND
Benzene	0.001	0.002	ND	ND	ND	ND	ND	ND
Trichloroethene	0.002	0.004	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	0.002	0.005	ND	ND	ND	ND	ND	ND
Bromodichloromethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Dibromomethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Trans-1,3-Dichloropropene	0.002	0.005	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	0.002	0.005	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.001	0.005	ND	ND	ND	ND	ND	ND
Dibromochloromethane	0.002	0.005	ND	ND	ND	ND	ND	ND
2-Chloroethylvinyl ether	0.002	0.010	ND	ND	ND	ND	ND	ND
Bromoform	0.002	0.005	ND	ND	ND	ND	ND	ND
Isopropylbenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
Bromobenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
Toluene	0.001	0.002	ND	ND	ND	ND	ND	ND
Tetrachloroethene	0.002	0.004	ND	ND	ND	ND	ND	ND

Client: Atlas Environmental Engineering Inc. Lab Job No.: R005102 Date Reported: 06-01-2010
Project:Goldenwest College Matrix: Soil Date Sampled: 05-25-2010

EPA 8260B (VOCs by GC/MS, Page 1 of 2)

Reporting Unit: mg/kg(ppm)

DATE ANALYZED			05-25	05-26-10	05-26-10	05-26-10	05-26-10	05-26-10
DILUTION FACTOR (DF)			1	1	50	1	1	1
LAB SAMPLE I.D.				R005102-11	R005102-12	R005102-13	R005102-14	R005102-15
CLIENT SAMPLE I.D.				VB3-5	VB3-10	VB3-15	VB3-20	VB3-25
COMPOUND	**MDL**	**PQL**	MB					
Dichlorodifluoromethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Chloromethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Vinyl Chloride	0.001	0.002	ND	ND	ND	ND	ND	ND
Bromomethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Chloroethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	0.002	0.005	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.002	0.005	ND	ND	ND	ND	ND	ND
Iodomethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Methylene Chloride	0.005	0.010	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.002	0.005	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	0.002	0.005	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	0.002	0.005	ND	ND	ND	ND	ND	ND
Bromochloromethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Chloroform	0.002	0.005	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.001	0.005	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	0.001	0.005	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	0.002	0.005	ND	ND	ND	ND	ND	ND
Benzene	0.001	0.002	ND	ND	0.682	ND	ND	ND
Trichloroethene	0.002	0.004	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	0.002	0.005	ND	ND	ND	ND	ND	ND
Bromodichloromethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Dibromomethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Trans-1,3-Dichloropropene	0.002	0.005	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	0.002	0.005	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.001	0.005	ND	ND	ND	ND	ND	ND
Dibromochloromethane	0.002	0.005	ND	ND	ND	ND	ND	ND
2-Chloroethylvinyl ether	0.002	0.010	ND	ND	ND	ND	ND	ND
Bromoform	0.002	0.005	ND	ND	ND	ND	ND	ND
Isopropylbenzene	0.002	0.005	ND	ND	0.669	ND	ND	ND
Bromobenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
Toluene	0.001	0.002	ND	ND	ND	ND	ND	ND
Tetrachloroethene	0.002	0.004	ND	ND	ND	ND	ND	ND

Client: Atlas Environmental Engineering Inc. Lab Job No.: R005102 Date Reported: 06-01-2010
Project:Goldenwest College Matrix: Soil Date Sampled: 05-25-2010

EPA 8260B (VOCs by GC/MS, Page 1 of 2)
Reporting Unit: mg/kg(ppm)

DATE ANALYZED			05-25	05-26-10	05-26-10	05-26-10	05-26-10	05-26-10
DILUTION FACTOR (DF)			1	1	1	1	1	1
LAB SAMPLE I.D.				R005102-16	R005102-17	R005102-18	R005102-19	R005102-20
CLIENT SAMPLE I.D.				VB3-30	VB4-5	VB4-10	VB4-15	VB4-20
COMPOUND	MDL	PQL	MB					
Dichlorodifluoromethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Chloromethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Vinyl Chloride	0.001	0.002	ND	ND	ND	ND	ND	ND
Bromomethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Chloroethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	0.002	0.005	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.002	0.005	ND	ND	ND	ND	ND	ND
Iodomethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Methylene Chloride	0.005	0.010	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.002	0.005	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	0.002	0.005	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	0.002	0.005	ND	ND	ND	ND	ND	ND
Bromochloromethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Chloroform	0.002	0.005	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.001	0.005	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	0.001	0.005	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	0.002	0.005	ND	ND	ND	ND	ND	ND
Benzene	0.001	0.002	ND	ND	ND	ND	ND	ND
Trichloroethene	0.002	0.004	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	0.002	0.005	ND	ND	ND	ND	ND	ND
Bromodichloromethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Dibromomethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Trans-1,3-Dichloropropene	0.002	0.005	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	0.002	0.005	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.001	0.005	ND	ND	ND	ND	ND	ND
Dibromochloromethane	0.002	0.005	ND	ND	ND	ND	ND	ND
2-Chloroethylvinyl ether	0.002	0.010	ND	ND	ND	ND	ND	ND
Bromoform	0.002	0.005	ND	ND	ND	ND	ND	ND
Isopropylbenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
Bromobenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
Toluene	0.001	0.002	ND	ND	ND	ND	ND	ND
Tetrachloroethene	0.002	0.004	ND	ND	ND	ND	ND	ND

Client: Atlas Environmental Engineering Inc. Lab Job No.: R005102 Date Reported: 06-01-2010
Project:Goldenwest College Matrix: Soil Date Sampled: 05-25-2010

EPA 8260B (VOCs by GC/MS, Page 1 of 2)

Reporting Unit: mg/kg(ppm)

DATE ANALYZED			05-26	05-26-10	05-26-10	05-26-10	05-26-10	05-26-10
DILUTION FACTOR (DF)			1	1	1	1	1	1
LAB SAMPLE I.D.				R005102-21	R005102-22	R005102-23	R005102-24	R005102-25
CLIENT SAMPLE I.D.				VB4-25	VB4-30	VB5-5	VB5-10	VB5-15
COMPOUND	MDL	PQL	MB					
Dichlorodifluoromethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Chloromethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Vinyl Chloride	0.001	0.002	ND	ND	ND	ND	ND	ND
Bromomethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Chloroethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	0.002	0.005	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.002	0.005	ND	ND	ND	ND	ND	ND
Iodomethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Methylene Chloride	0.005	0.010	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.002	0.005	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	0.002	0.005	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	0.002	0.005	ND	ND	ND	ND	ND	ND
Bromochloromethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Chloroform	0.002	0.005	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.001	0.005	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	0.001	0.005	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	0.002	0.005	ND	ND	ND	ND	ND	ND
Benzene	0.001	0.002	ND	ND	ND	ND	ND	ND
Trichloroethene	0.002	0.004	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	0.002	0.005	ND	ND	ND	ND	ND	ND
Bromodichloromethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Dibromomethane	0.002	0.005	ND	ND	ND	ND	ND	ND
Trans-1,3-Dichloropropene	0.002	0.005	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.002	0.005	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	0.002	0.005	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.001	0.005	ND	ND	ND	ND	ND	ND
Dibromochloromethane	0.002	0.005	ND	ND	ND	ND	ND	ND
2-Chloroethylvinyl ether	0.002	0.010	ND	ND	ND	ND	ND	ND
Bromoform	0.002	0.005	ND	ND	ND	ND	ND	ND
Isopropylbenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
Bromobenzene	0.002	0.005	ND	ND	ND	ND	ND	ND
Toluene	0.001	0.002	ND	ND	ND	ND	ND	ND
Tetrachloroethene	0.002	0.004	ND	ND	ND	ND	ND	ND

Client: Atlas Environmental Engineering Inc. Lab Job No.: R005102 Date Reported: 06-01-2010
Project:Goldenwest College Matrix: Soil Date Sampled: 05-25-2010

EPA 8260B (VOCs by GC/MS, Page 1 of 2)
Reporting Unit: mg/kg(ppm)

DATE ANALYZED			05-26	05-26-10	05-26-10	05-26-10		
DILUTION FACTOR (DF)			1	1	1	1		
LAB SAMPLE I.D.				R005102-26	R005102-27	R005102-28		
CLIENT SAMPLE I.D.				VB5-20	VB5-25	VB5-30		
COMPOUND	**MDL**	**PQL**	MB					
Dichlorodifluoromethane	0.002	0.005	ND	ND	ND	ND		
Chloromethane	0.002	0.005	ND	ND	ND	ND		
Vinyl Chloride	0.001	0.002	ND	ND	ND	ND		
Bromomethane	0.002	0.005	ND	ND	ND	ND		
Chloroethane	0.002	0.005	ND	ND	ND	ND		
Trichlorofluoromethane	0.002	0.005	ND	ND	ND	ND		
1,1-Dichloroethene	0.002	0.005	ND	ND	ND	ND		
Iodomethane	0.002	0.005	ND	ND	ND	ND		
Methylene Chloride	0.005	0.010	ND	ND	ND	ND		
trans-1,2-Dichloroethene	0.002	0.005	ND	ND	ND	ND		
1,1-Dichloroethane	0.002	0.005	ND	ND	ND	ND		
2,2-Dichloropropane	0.002	0.005	ND	ND	ND	ND		
cis-1,2-Dichloroethene	0.002	0.005	ND	ND	ND	ND		
Bromochloromethane	0.002	0.005	ND	ND	ND	ND		
Chloroform	0.002	0.005	ND	ND	ND	ND		
1,2-Dichloroethane	0.001	0.005	ND	ND	ND	ND		
1,1,1-Trichloroethane	0.002	0.005	ND	ND	ND	ND		
Carbon tetrachloride	0.001	0.005	ND	ND	ND	ND		
1,1-Dichloropropene	0.002	0.005	ND	ND	ND	ND		
Benzene	0.001	0.002	ND	ND	ND	ND		
Trichloroethene	0.002	0.004	ND	ND	ND	ND		
1,2-Dichloropropane	0.002	0.005	ND	ND	ND	ND		
Bromodichloromethane	0.002	0.005	ND	ND	ND	ND		
Dibromomethane	0.002	0.005	ND	ND	ND	ND		
Trans-1,3-Dichloropropene	0.002	0.005	ND	ND	ND	ND		
cis-1,3-Dichloropropene	0.002	0.005	ND	ND	ND	ND		
1,1,2-Trichloroethane	0.002	0.005	ND	ND	ND	ND		
1,3-Dichloropropane	0.001	0.005	ND	ND	ND	ND		
Dibromochloromethane	0.002	0.005	ND	ND	ND	ND		
2-Chloroethylvinyl ether	0.002	0.010	ND	ND	ND	ND		
Bromoform	0.002	0.005	ND	ND	ND	ND		
Isopropylbenzene	0.002	0.005	ND	ND	ND	ND		
Bromobenzene	0.002	0.005	ND	ND	ND	ND		
Toluene	0.001	0.002	ND	ND	ND	ND		
Tetrachloroethene	0.002	0.004	ND	ND	ND	ND		

06-01-2010

TPH-Gasoline
Batch QA/QC Report

Client:	Atlas Environmental Engineering, Inc.	Lab Job No:	R005102
Project:	Goldenwest College		
Matrix:	Soil	Lab Sample ID:	R005102-2
Batch No:	BME25-GS2	Date Analyzed:	05-26-2010

I. MS/MSD Report
Unit: ppb

Analyte	Sample Conc.	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
TPH-g	ND	1,000	820	838	82.0	83.8	2.2	30	70-130

II. LCS Result
Unit: ppb

Analyte	LCS Value	True Value	Rec.%	Accept. Limit
TPH-g	843	1,000	84.3	80-120

ND: Not Detected (at the specified limit).

06-01-2010

TPH-Gasoline
Batch QA/QC Report

Client:	Atlas Environmental Engineering, Inc.	Lab Job No:	R005102
Project:	Goldenwest College		
Matrix:	Soil	Lab Sample ID:	S005095-40
Batch No:	CME26-GS1	Date Analyzed:	05-27-2010

I. MS/MSD Report
Unit: ppb

Analyte	Sample Conc.	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
TPH-g	ND	1,000	937	936	93.7	93.6	0.1	30	70-130

II. LCS Result
Unit: ppb

Analyte	LCS Value	True Value	Rec.%	Accept. Limit
TPH-g	946	1,000	94.6	80-120

ND: Not Detected (at the specified limit).

06-01-2010

TPH-Gasoline
Batch QA/QC Report

Client:	Atlas Environmental Engineering, Inc.	Lab Job No:	R005102
Project:	Goldenwest College		
Matrix:	Water	Lab Sample ID:	S005100-11
Batch No:	EME26-GW1	Date Analyzed:	05-27-2010

I. MS/MSD Report
Unit: ppb

Analyte	Sample Conc.	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
TPH-g	ND	1,000	954	907	95.4	90.7	5.1	30	70-130

II. LCS Result
Unit: ppb

Analyte	LCS Value	True Value	Rec.%	Accept. Limit
TPH-g	961	1,000	96.1	80-120

ND: Not Detected (at the specified limit).

06-01-2010

EPA 8015M (TPH)
Batch QA/QC Report

Client:	Atlas Environmental Engineering, Inc.	Lab Job No:	R005102
Project:	Goldenwest College		
Matrix:	Soil	Lab Sample I.D:	S005095-61
Batch No. :	BE26-DS2	Date Analyzed:	05-27-2010

I. MS/MSD Report
Unit: ppm

Analyte	Sample Conc.	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
TPH-d	ND	200	211	225	105.5	112.5	6.4	30	70-130

II. LCS Result
Unit: ppm

Analyte	LCS Report Value	True Value	Rec.%	%Rec Accept. Limit
TPH-d	210	200	105.0	80-120

ND: Not Detected (at the specified limit).

06-01-2010

EPA 8015M (TPH)
Batch QA/QC Report

Client:	Atlas Environmental Engineering, Inc.	Lab Job No:	R005102
Project:	Goldenwest College		
Matrix:	Soil	Lab Sample ID:	AI005120-1
Batch No.:	BE28-DS1	Date Analyzed:	05-29-2010

I. MS/MSD Report
Unit: ppm

Analyte	Sample Conc.	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
TPH-D	ND	202	208	207	103.0	102.5	0.5	30	70-130

II. LCS Report
Unit: ppm

Analyte	LCS Report Value	True Value	Rec.%	Accept. Limit
TPH-D	201	200	100.5	80-120

ND: Not Detected (at the specified limit).

06-01-2010

EPA 8015M (TPH)
Batch QA/QC Report

Client: Atlas Environmental Engineering, Inc.
Project: Goldenwest College
Matrix: Water
Batch No for TPH-d: BE28-DW1

Lab Job No: R005102
Lab Sample ID: SW005028-1
Date Analyzed: 05-28-2010

I. MS/MSD Report
Unit: ppm

Analyte	Sample Conc.	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
TPH-D	ND	20	20.1	20.5	100.5	102.5	2.0	30	70-130

II. LCS Result
Unit: ppm

Analyte	LCS Value	True Value	Rec.%	Accept. Limit
TPH-D	19.7	20	98.5	80-120

ND: Not Detected (at the specified limit).

06-01-2010

EPA Method 8260B
Batch QA/QC Report

Client:	Atlas Environmental Engineering, Inc.	Lab Job No:	R005102
Project:	Goldenwest College		
Matrix:	Soil	Lab Sample ID:	R005102-2
Batch No:	0525-VOBS2	Date Analyzed:	05-26-2010

I. MS/MSD Report
Unit: ppb

Analyte	Sample Conc.	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
1,1-Dichloroethene	ND	20	19.7	17.3	98.5	86.5	13.0	30	70-130
Benzene	ND	20	17.7	17.6	88.5	88.0	0.6	30	70-130
Trichloro-ethene	ND	20	17.1	18.5	85.5	92.5	7.9	30	70-130
Toluene	ND	20	18.4	20.4	92.0	102.0	10.3	30	70-130
Chlorobenzene	ND	20	19.6	21.2	98.0	106.0	7.8	30	70-130

II. LCS Result
Unit: ppb

Analyte	LCS Value	True Value	Rec.%	Accept. Limit
1,1-Dichloroethene	18.1	20.0	90.5	80-120
Benzene	18.6	20.0	93.0	80-120
Trichloro-ethene	20.2	20.0	101.0	80-120
Toluene	19.2	20.0	96.0	80-120
Chlorobenzene	22.3	20.0	111.5	80-120

ND: Not Detected (at the specified limit)

06-01-2010

EPA Method 8260B
Batch QA/QC Report

Client:	Atlas Environmental Engineering, Inc.	Lab Job No:	R005102
Project:	Goldenwest College		
Matrix:	Soil	Lab Sample ID:	S005095-40
Batch No:	0526-VOCS1	Date Analyzed:	05-27-2010

I. MS/MSD Report
Unit: ppb

Analyte	Sample Conc.	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
1,1-Dichloroethene	ND	20	18.1	19.7	90.5	98.5	8.5	30	70-130
Benzene	ND	20	18.5	18.7	92.5	93.5	1.1	30	70-130
Trichloro-ethene	ND	20	16.3	16.8	81.5	84.0	3.0	30	70-130
Toluene	ND	20	16.3	16.3	81.5	81.5	0	30	70-130
Chlorobenzene	ND	20	15.4	16.6	77.0	83.0	7.5	30	70-130

II. LCS Result
Unit: ppb

Analyte	LCS Value	True Value	Rec.%	Accept. Limit
1,1-Dichloroethene	21.4	20.0	107.0	80-120
Benzene	20.9	20.0	104.5	80-120
Trichloro-ethene	18.2	20.0	91.0	80-120
Toluene	19.3	20.0	96.5	80-120
Chlorobenzene	18.7	20.0	93.5	80-120

ND: Not Detected (at the specified limit)

06-01-2010

EPA Method 8260B
Batch QA/QC Report

Client: Atlas Environmental Engineering, Inc.
Project: Goldenwest College
Matrix: Water
Batch No: 0526-VOEW1

Lab Job No: R005102
Lab Sample ID: S005100-11
Date Analyzed: 05-27-2010

I. MS/MSD Report
Unit: ppb

Analyte	Sample Conc.	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
1,1-Dichloroethene	ND	20	20.7	19.1	103.5	95.5	8.0	30	70-130
Benzene	ND	20	19.0	17.2	95.0	86.0	9.9	30	70-130
Trichloro-ethene	ND	20	19.3	18.4	96.5	92.0	4.8	30	70-130
Toluene	ND	20	20.2	17.7	101.0	88.5	13.2	30	70-130
Chlorobenzene	ND	20	18.2	15.8	91.0	79.0	14.1	30	70-130

II. LCS Result
Unit: ppb

Analyte	LCS Value	True Value	Rec.%	Accept. Limit
1,1-Dichloroethene	21.1	20.0	105.5	80-120
Benzene	18.7	20.0	93.5	80-120
Trichloro-ethene	19.9	20.0	99.5	80-120
Toluene	20.5	20.0	102.5	80-120
Chlorobenzene	17.7	20.0	88.5	80-120

ND: Not Detected (at the specified limit).

ALPHA SCIENTIFIC CORPORATION

R005102

ATLAS ENVIRONMENTAL ENGINEERING, INC. — CHAIN OF CUSTODY FORM

P.O. NUMBER	SITE/PROJECT NAME:
GWC-A51	GOLDEN WEST COLLEGE (MAINTENANCE YARD)
JOB NUMBER:	**SITE/PROJECT LOCATION:**
GWC A51	15744 GOLDENWEST STREET HUNTINGTON BEACH, CA
SAMPLER(S) SIGNATURE: T. Robins Tom Robins	

SOIL SAMPLES

EPA ANALYTICAL METHOD

SUBMIT RESULTS TO:

ATLAS ENVIRONMENTAL ENG.
3185 AIRWAY AVENUE, SUITE D-1
COSTA MESA, CA 92626

ATTN: KARL KERNER
PHONE NO. (714) 890-7129
FAX NO. (714) 890-7149

SAMPLE NUMBER (ID)	YEAR 2010 DATE MM/DD	TIME AM/PM	DEPTH BELOW GRADE (ft)	NO. OF CONTAINERS	EPA 8015M TPH(g) TPH(d)	EPA 8260B VOCs Full List				REMARKS
VB1-15	5-25-10	8:05	15	1	X	X				R005102-1
VB1-20		8:10	20	1	X	X				-2
VB1-25		8:18	25	1	X	X				-3
VB1-30		8:20	30	1	X	X				-4
VB2-5		9:05	5	1	X	X				-5
VB2-10		9:10	10	1	X	X				-6
VB2-15		9:15	15	1	X	X				-7
VB2-20		9:20	20	1	X	X				-8
VB2-25		9:25	25	1	X	X				-9
VB2-30		9:35	30	1	X	X				-10
VB3-5		10:20	5	1	X	X				-11
VB3-10		10:25	10	1	X	X				-12
VB3-15		10:30	15	1	X	X				-13
VB3-20		10:35	20	1	X	X				-14
VB3-25		10:40	25	1	X	X				-15
VB3-30	↓	10:50	30	1	X	X				-16
VB-1	5-25-10	8:30	—	2	X	X				Water Sample R005102-29

SAMPLES INTACT: YES ✓ NO	RELINQUISHED	DATE/TIME	DATE/TIME	RECEIVED
SAMPLES PROPERLY COOLED: YES ✓ NO				
TEMPERATURED STORED: 4°C	RELINQUISHED BY (SIGNATURE)/COMPANY: T. Robins	DATE/TIME	DATE/TIME 5-25-10 13:30	RECEIVED BY (SIGNATURE)/COMPANY: RW/ASC
PRESERVATIVES ADDED: YES NO ✓ TYPE:				
SAMPLES ACCEPTED: YES ✓ NO	RELINQUISHED BY (SIGNATURE)/COMPANY:	DATE/TIME	DAT/TIME	RECEIVED BY (SIGNATURE)/COMPANY:
IF NOT, WHY:				
SAMPLES PLACED IN LAB REFRIGERATOR YES ✓ NO REP. INITIALS R.W.	RELINQUISHED BY (SIGNATURE)/COMPANY:	DATE/TIME	DATE/TIME	RECEIVED BY (SIGNATURE)/COMPANY:
LABORATORY NAME: ASC, Cerritos, California				

ALPHA SCIENTIFIC CORPORATION

R005102

ATLAS ENVIRONMENTAL ENGINEERING, INC. **CHAIN OF CUSTODY FORM**

P.O. NUMBER:	SITE/PROJECT NAME:
GWC-ASI	GOLDEN WEST COLLEGE (MAINTENANCE YARD)
JOB NUMBER:	SITE/PROJECT LOCATION:
GWC-ASI	15744 GOLDENWEST STREET HUNTINGTON BEACH, CA

SAMPLER(S) SIGNATURE: T. [signature] Tom Robins

SOIL SAMPLES

EPA ANALYTICAL METHOD

SUBMIT RESULTS TO:

ATLAS ENVIRONMENTAL ENG.
3185 AIRWAY AVENUE, SUITE D-1
COSTA MESA, CA 92626

ATTN: KARL KERNER
PHONE NO. (714) 890-7129
FAX NO. (714) 890-7149

SAMPLE NUMBER (ID)	YEAR 2010 DATE MM/DD	TIME AM/PM	DEPTH BELOW GRADE (ft)	NO. OF CONTAINERS	EPA 8015M TPH(g) TPH(d)	EPA 8260B VOCs Full List				REMARKS
VB4-5	5-25-10	11:00	5	1	X	X				R005102-17
VB4-10		11:05	10	1	X	X				-18
VB4-15		11:10	15	1	X	X				-19
VB4-20		11:15	20	1	X	X				-20
VB4-25		11:20	25	1	X	X				-21
VB4-30		11:30	30	1	X	X				-22
VB5-5		11:50	5	1	X	X				-23
VB5-10		11:55	10	1	X	X				-24
VB5-15		12:00	15	1	X	X				-25
VB5-20		12:05	20	1	X	X				-26
VB5-25		12:10	25	1	X	X				-27
VB5-30		12:20	30	1	X	X				-28

SAMPLES INTACT: YES..✓..... NO.....
SAMPLES PROPERLY COOLED: YES..✓..... NO.....
TEMPERATURED STORED: 4°C
PRESERVATIVES ADDED: YES.... NO..✓.. TYPE:
SAMPLES ACCEPTED: YES...✓..... NO.....
IF NOT, WHY: _____

SAMPLES PLACED IN LAB REFRIGERATOR
YES..✓..... NO..... REP. INITIALS..R.W.....

LABORATORY NAME: ASC, Cerritos, California

RELINQUISHED	DATE/TIME	DATE/TIME	RECEIVED
RELINQUISHED BY (SIGNATURE)/COMPANY: T. [signature]	DATE/TIME	DATE/TIME 5-25-10 13:30	RECEIVED BY (SIGNATURE)/COMPANY: [signature] /ASC
RELINQUISHED BY (SIGNATURE)/COMPANY:	DATE/TIME	DAT/TIME	RECEIVED BY (SIGNATURE)/COMPANY:
RELINQUISHED BY (SIGNATURE)/COMPANY:	DATE/TIME	DATE/TIME	RECEIVED BY (SIGNATURE)/COMPANY:

ATTACHMENT C

Property Background Information Questionnaire

Environmental Site Assessment
Property Background Information Questionnaire for Property Owner, Occupant, or Representative

PLEASE GIVE FURTHER DETAILS FOR ALL "YES" ANSWERS.

1. Describe the current uses of the Property. How long has the property been used for these purposes, and how long have you occupied the Property?

   We are and always have been a Community College since 1965.

2. Describe the past uses, owners, and operators of the Property.

   Unknown

3. Have the Property or adjoining properties been used for industrial activities including the following? (Please note that an adjoining property is a property that is next to your Property, even if it is across the street).

Gasoline Station	☑ Yes	☐ No
Printing Facility	☐ Yes	☑ No
Metal Plating Manufacturing	☐ Yes	☑ No
Landfill	☐ Yes	☑ No
Motor Repair Facility	☑ Yes	☐ No
Dry Cleaners	☐ Yes	☑ No
Junkyard	☐ Yes	☑ No
Waste Treatment	☐ Yes	☑ No
Storage, Disposal, or Recycling Facility	☐ Yes	☑ No

   Describe other industrial activities, if any.

4. Have any hazardous substances, petroleum products, unidentified waste materials, tires, automotive or industrial batteries, or other waste materials been dumped above ground, buried, or burned on the Property? ☐ Yes ☑ No

   If yes, please describe.

5. Have any of the following items been stored on the Property in containers greater than 5 gallons?

   Paint ☐ Yes ☑ No
   Chemicals ☐ Yes ☑ No
   Pesticides ☐ Yes ☑ No

6. Have hazardous substances or petroleum products been stored on the Property or transferred across the Property in pipelines, either above or below ground?

   ☑ Yes ☐ No ☐ Unknown

7. Have 55-gallon drums or sacks of chemicals been stored on the Property?

   ☑ Yes ☐ No ☐ Unknown

8. Has fill dirt been brought onto the property from an offsite source?

   ☑ Yes ☐ No ☐ Unknown

9. Is there evidence that the fill dirt in Question 8 may be contaminated?

   ☐ Yes ☑ No ☐ Unknown

10. Are there currently any pits, ponds, or lagoons on the Property?

    ☐ Yes ☑ No ☐ Unknown

11. Have any pits, ponds, or lagoons previously existed on the Property?

    ☐ Yes ☑ No ☐ Unknown

12. Are there currently areas on the Property with stained soil?

    ☐ Yes ☑ No ☐ Unknown

13. Have stained soils previously existed on the property?

    ☑ Yes ☐ No ☐ Unknown

14. Do underground or above-ground storage tanks exist, or have they existed previously on the Property?

☑ Yes ☐ No ☐ Unknown

15. Do fill pipes, vent pipes, or access ways indicating the presence of underground storage tanks exist on the Property?

☐ Yes ☑ No ☐ Unknown

16. Have fill pipes or vent pipes which may indicate the presence of an underground storage tank been removed from the Property?

☑ Yes ☐ No ☐ Unknown

17. Are floor drains stained with anything other than water in any area on the Property?

☐ Yes ☑ No ☐ Unknown

18. Do floor drains on the Property emit foul odors?

☐ Yes ☑ No ☐ Unknown

19. Is the Property served by private well or non-public water source?

☐ Yes ☑ No ☐ Unknown

20. Are contaminants known to exist in any private well or non-public water system serving the Property?

☐ Yes ☑ No ☐ Unknown

21. Does the Property discharge wastewater, other than domestic wastewater or storm water, into the sewer?

☐ Yes ☑ No ☐ Unknown

22. Other than permission for domestic hookup, have any city, county, or local permits for wastewater discharge been issued to the Property?

☐ Yes ☐ No ☑ Unknown

23. Does a septic tank exist, or has one existed previously at the Property?

☐ Yes ☑ No ☐ Unknown

24. Do cesspools or cisterns currently exist on the Property?

☐ Yes ☑ No ☐ Unknown

25. Have cesspools or cisterns previously existed on the Property?

☐ Yes ☑ No ☐ Unknown

26. Other than storm water, does the Property discharge waste water onto the neighboring Property?

☐ Yes ☑ No ☐ Unknown

27. Is there a transformer or capacitor that may contain PCBs on the Property?

☐ Yes ☑ No ☐ Unknown

28. Is there any hydraulic equipment such as automobile lifts or elevators on the property?

☑ Yes ☐ No ☐ Unknown

29. Are PCBs contained in hydraulic oil associated with hydraulic equipment located on the Property?

☐ Yes ☐ No ☑ Unknown

30. Has an asbestos and/or lead based paint survey been conducted at the Property?

☑ Yes ☐ No ☐ Unknown

31. Have pesticides, herbicides, or insecticides been applied on the Property?

☑ Yes ☐ No ☐ Unknown

32. Are you aware of any environmental liens against the Property that are filed or recorded under federal, tribal, state, or local law?

☐ Yes ☑ No ☐ Unknown

33. Have any environmental violations or citations associated with activities conducted on the Property been issued?

☐ Yes ☑ No ☐ Unknown

34. Has the property been included in other environmental assessments?

☑ Yes ☐ No ☐ Unknown

35. Have other environmental assessments identified hazardous substances or petroleum products that exist, or may have existed on the Property?

☑ Yes ☐ No ☐ Unknown

36. Are there any pending law suits that involve the release or threatened release of hazardous substances associated with the Property?

☐ Yes ☑ No ☐ Unknown

37. Are you aware of any activity and land use limitations, such as engineering controls, land use restrictions or institutional controls that are in place at the Property and/or have been filed or recorded in a registry under federal, tribal, state or local law?

☐ Yes ☑ No ☐ Unknown

38. Are you aware of any commonly known or reasonably ascertainable information about the Property that would help the environmental professional to identify conditions indicative of releases or threatened releases?

☑ Yes ☐ No ☐ Unknown

39. Do you have any specialized knowledge or experience related to the Property or near-by properties, including the knowledge of the chemicals and processes used by this type of business?

☑ Yes ☐ No ☐ Unknown

40. Based in your knowledge or experience related to the Property, are there any obvious indicators that point to the presence or likely presence of contamination?

None at this time.

Joseph Dowling
Signature

12/6/13
Date

Joseph Dowling
Name (Printed)

☐ Owner ☐ Occupant ☑ Owner Representative

Property Address: 15744 GoldenWest St.
P.O. Box 2748 HB, Ca 92647

ATTACHMENT D

Aerial Photographs and Topographic Maps

Golden West College
15744 Goldenwest St
Huntington Beach, CA 92647

Inquiry Number: 3772583.5
November 04, 2013

The EDR Aerial Photo Decade Package

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

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Please contact EDR at 1-800-352-0050
with any questions or comments.

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Date EDR Searched Historical Sources:

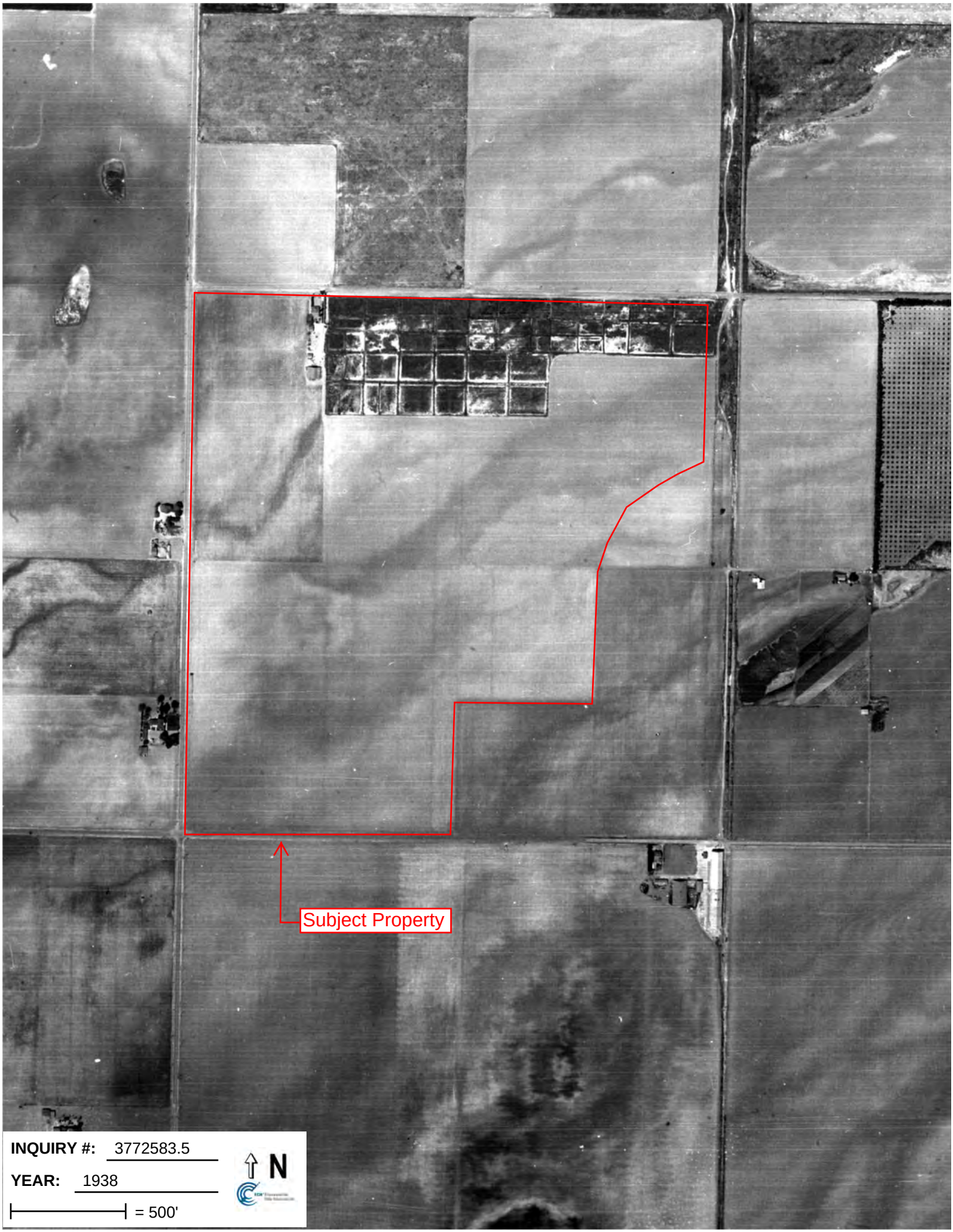
Aerial Photography November 04, 2013

Target Property:

15744 Goldenwest St

Huntington Beach, CA 92647

Year	***Scale***	***Details***	***Source***
1938	Aerial Photograph. Scale: 1"=500'	Flight Year: 1938	Laval
1947	Aerial Photograph. Scale: 1"=500'	Flight Year: 1947	Fairchild
1953	Aerial Photograph. Scale: 1"=500'	Flight Year: 1953	Pacific Air
1963	Aerial Photograph. Scale: 1"=500'	Flight Year: 1963	EDR
1972	Aerial Photograph. Scale: 1"=500'	Flight Year: 1972	EDR
1977	Aerial Photograph. Scale: 1"=500'	Flight Year: 1977	Teledyne
1990	Aerial Photograph. Scale: 1"=500'	Flight Year: 1990	USGS
1994	Aerial Photograph. Scale: 1"=500'	/DOQQ - acquisition dates: 1994	EDR
2005	Aerial Photograph. Scale: 1"=500'	Flight Year: 2005	EDR
2009	Aerial Photograph. Scale: 1"=500'	Flight Year: 2009	EDR
2010	Aerial Photograph. Scale: 1"=500'	Flight Year: 2010	EDR
2012	Aerial Photograph. Scale: 1"=500'	Flight Year: 2012	EDR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INQUIRY #: 3772583.5
YEAR: 1938
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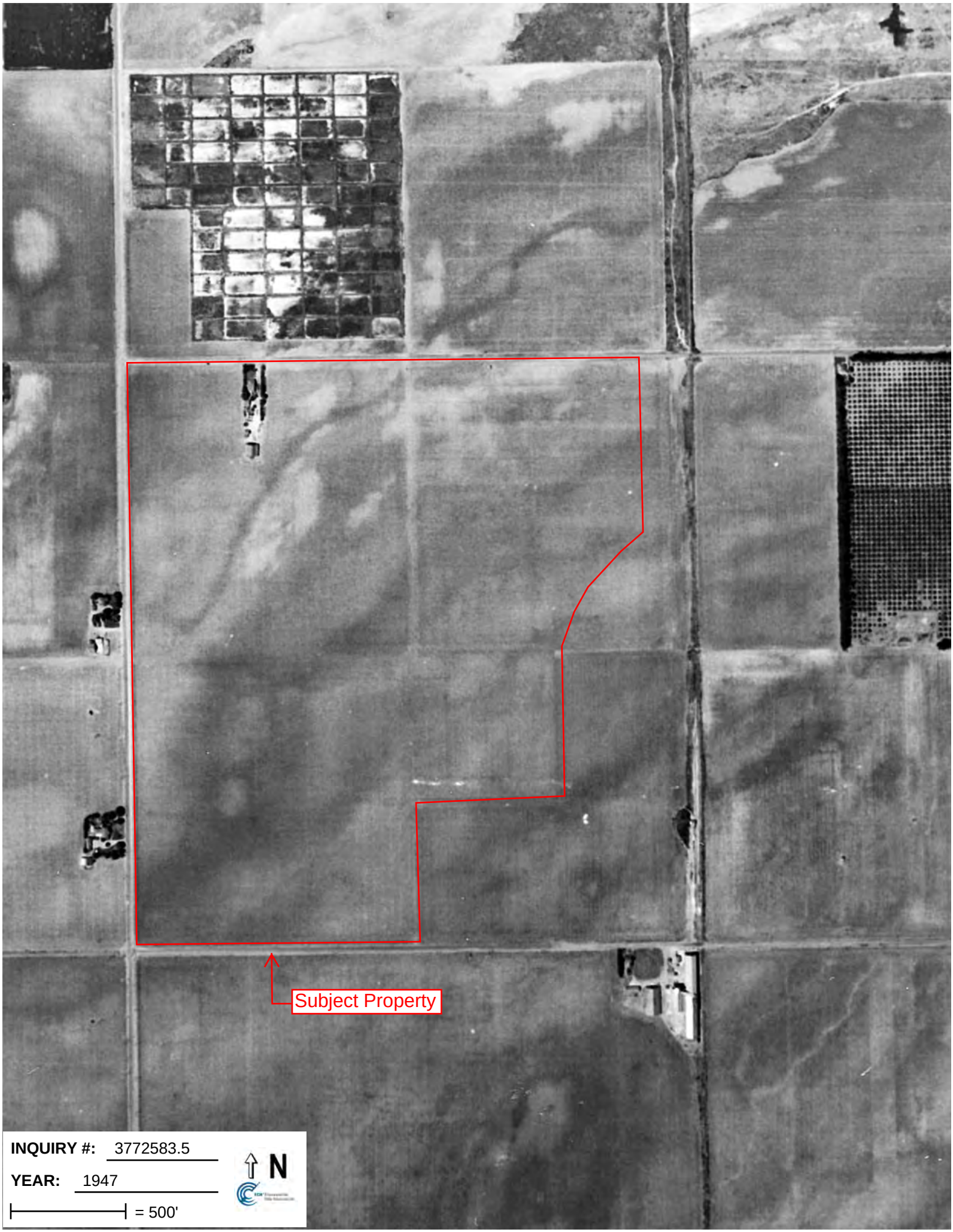
N


Subject Property
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YEAR: 1947
= 500'
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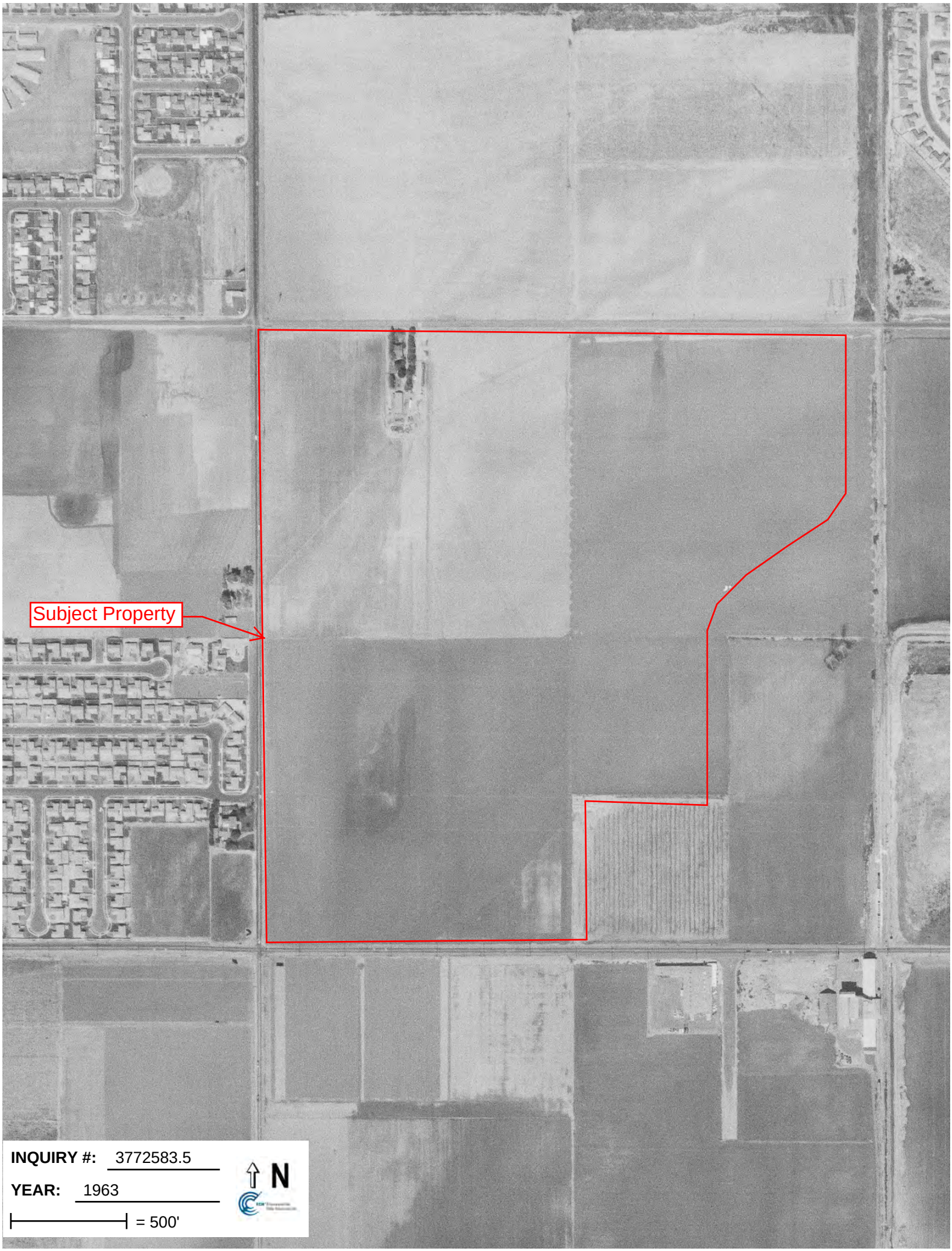
INQUIRY #: 3772583.5

YEAR: 1953

= 500'

N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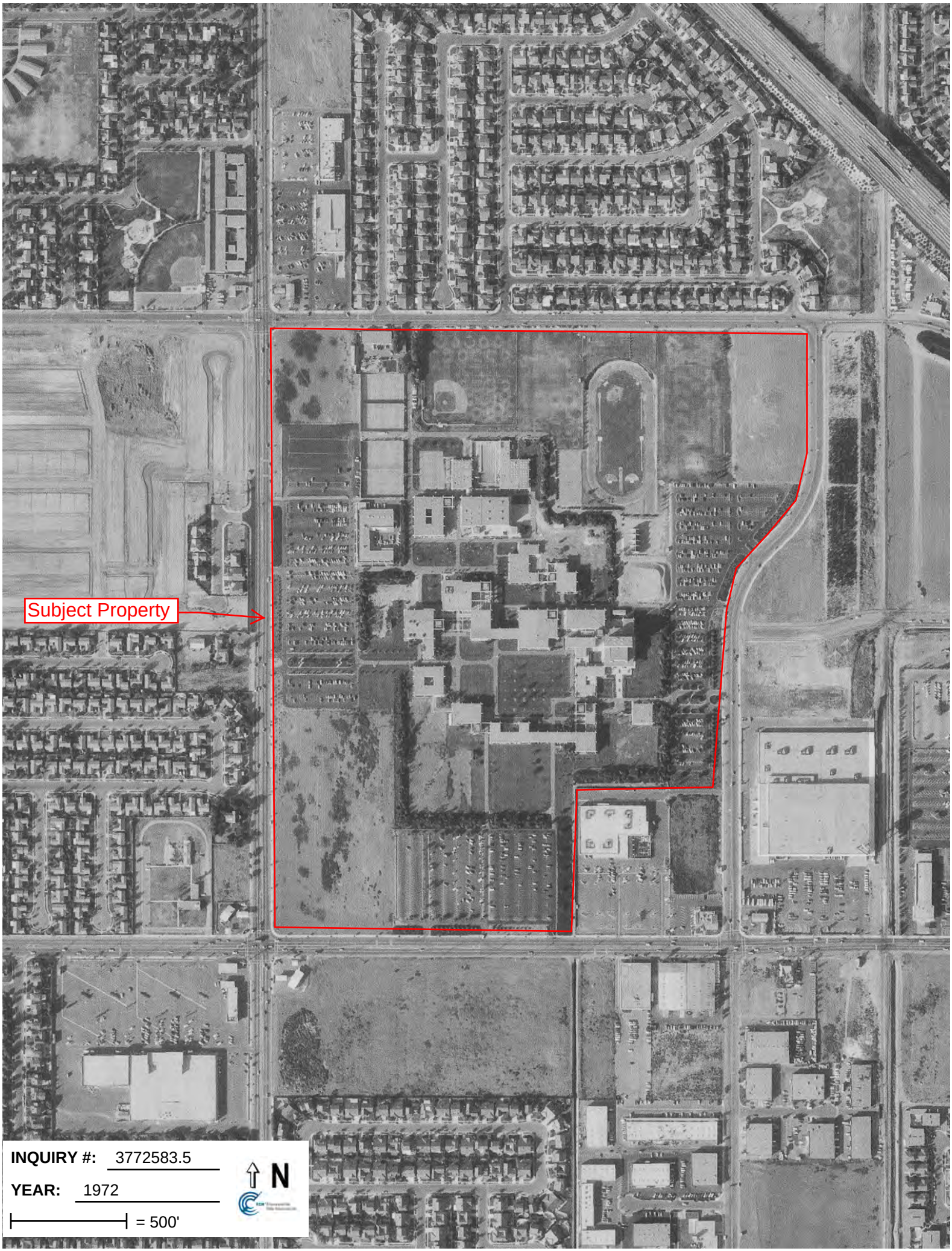
Subject Property
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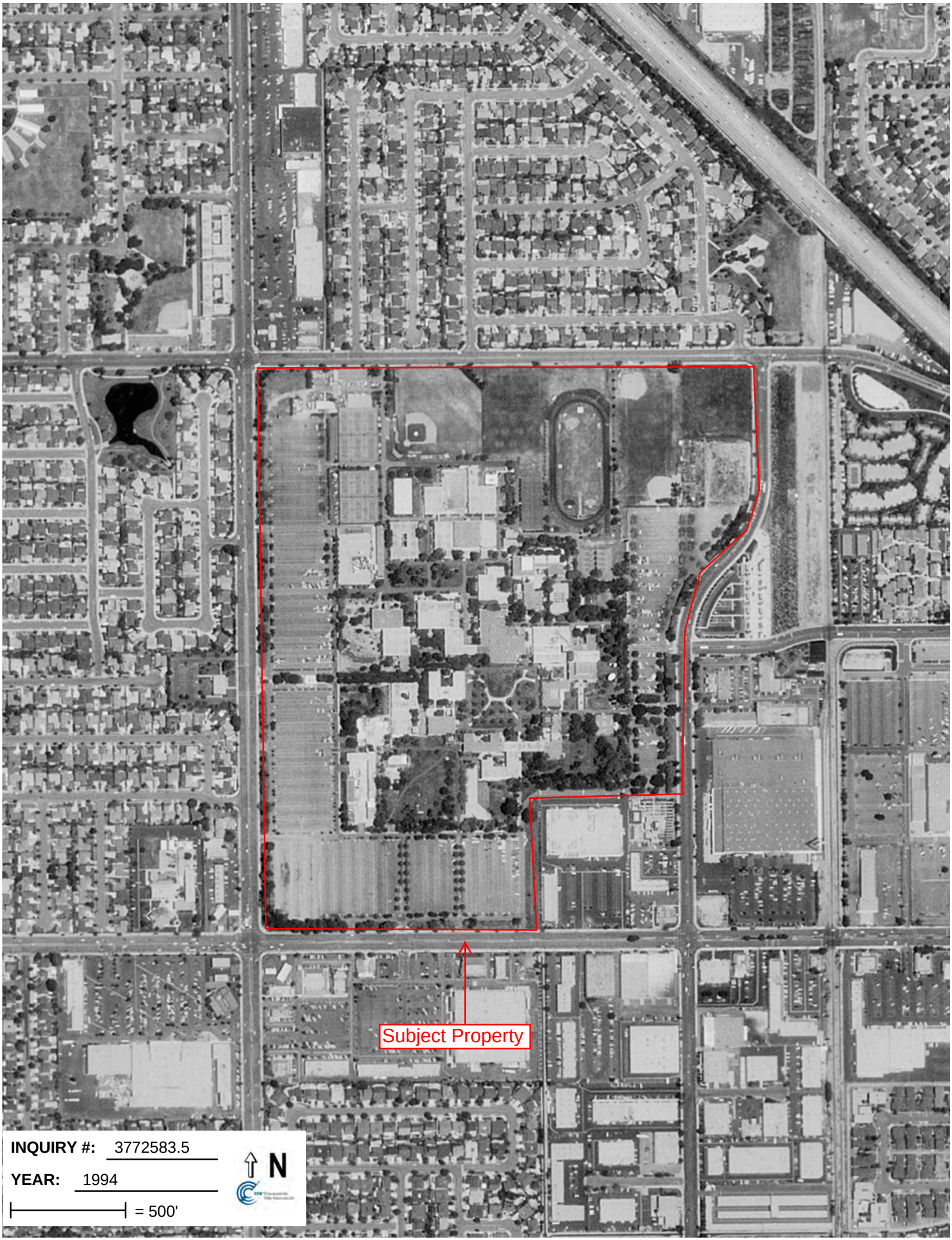
YEAR: 1972
= 500'
N


Subject Property
INQUIRY #: 3772583.5
YEAR: 1977
= 500'
N


Subject Property
INQUIRY #: 3772583.5
YEAR: 1990
= 500'
N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Subject Property
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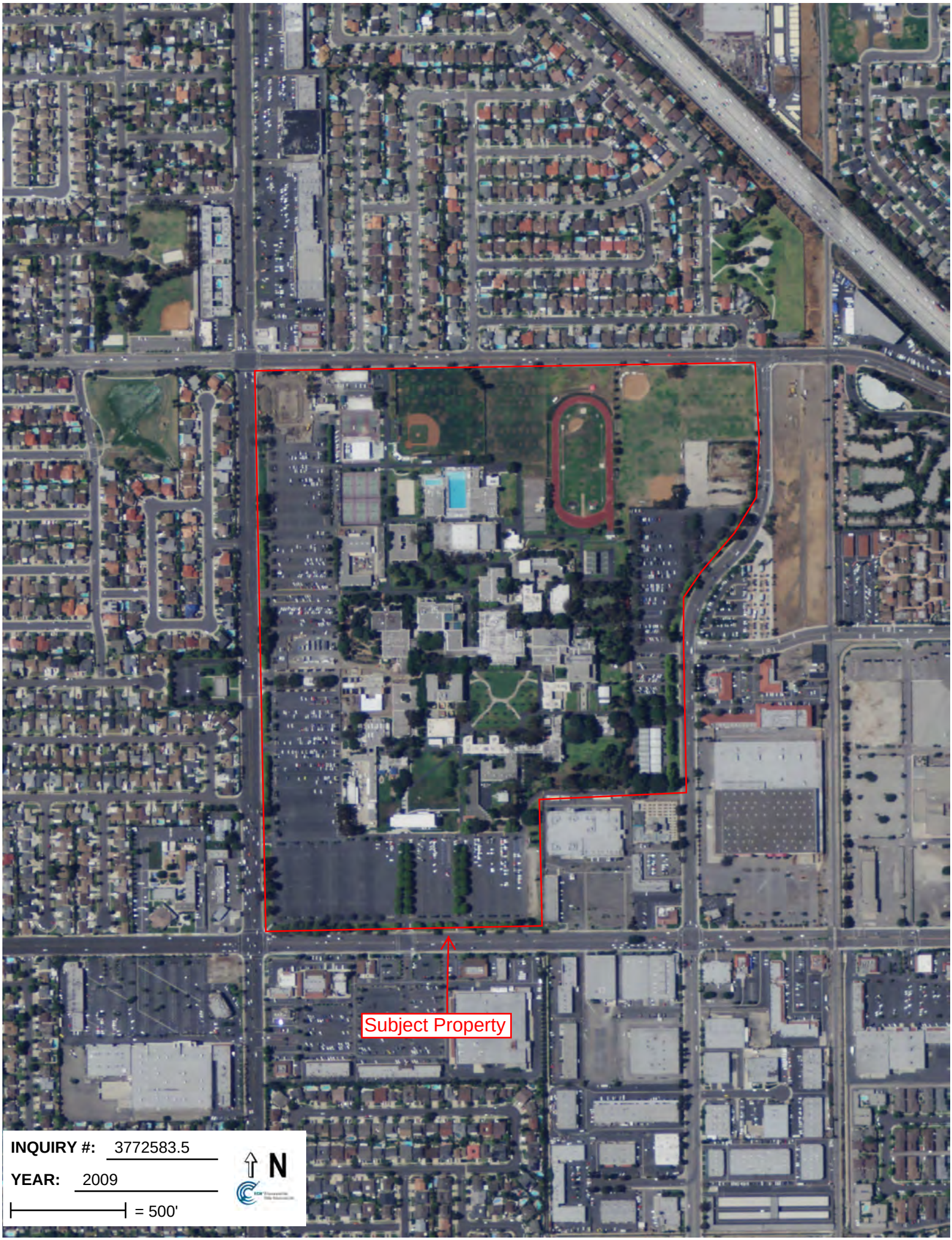
YEAR: 2005
= 500'
N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YEAR: 2009
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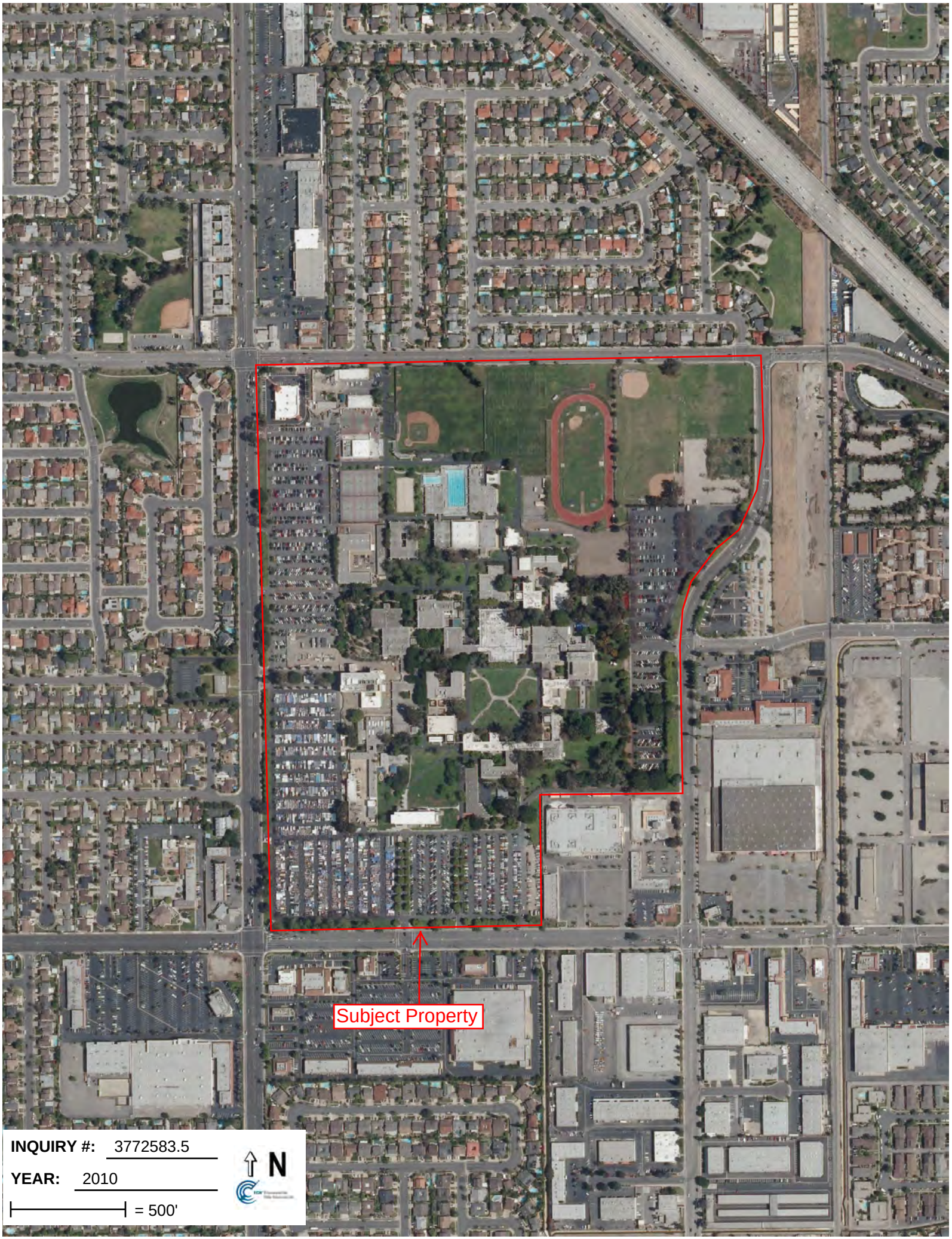
Subject Property
INQUIRY #: 3772583.5
YEAR: 2010
= 500'
N


Subject Property
INQUIRY #: 3772583.5
YEAR: 2012
= 500'
N

Golden West College
15744 Goldenwest St
Huntington Beach, CA 92647

Inquiry Number: 3772583.4
October 31, 2013

EDR Historical Topographic Map Report

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

EDR Historical Topographic Map Report

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Historical Topographic Map



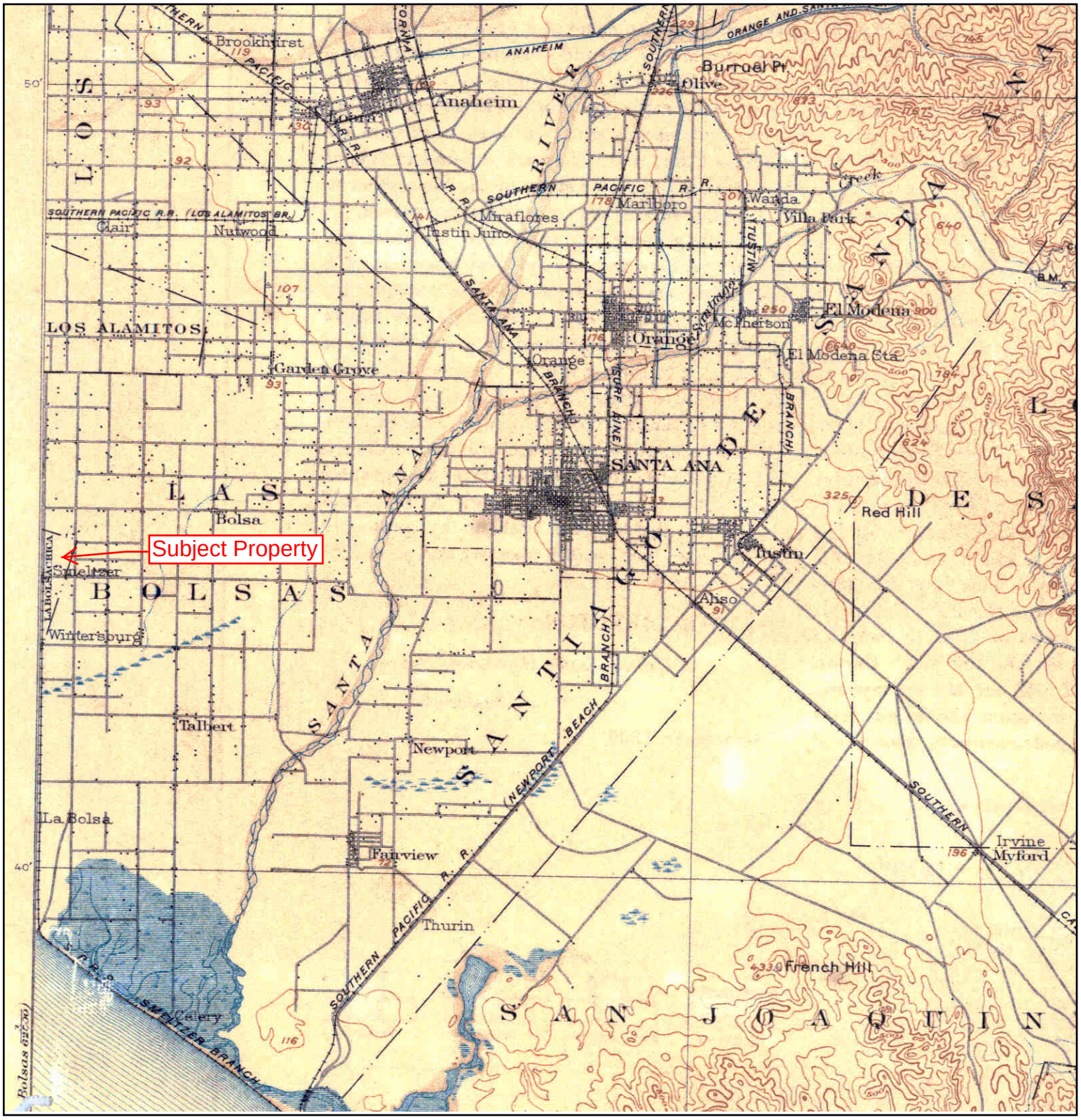
N	TARGET QUAD NAME: SOUTHERN CA SHEET 1 MAP YEAR: 1901 SERIES: 60 SCALE: 1:250000	SITE NAME: Golden West College ADDRESS: 15744 Goldenwest St Huntington Beach, CA 92647 LAT/LONG: 33.7339 / -118.0038	CLIENT: Dudek & Associates CONTACT: Khristina Leyba INQUIRY#: 3772583.4 RESEARCH DATE: 10/31/2013

Historical Topographic Map



N	ADJOINING QUAD NAME: SANTA ANA MAP YEAR: 1901 SERIES: 15 SCALE: 1:62500	SITE NAME: Golden West College ADDRESS: 15744 Goldenwest St Huntington Beach, CA 92647 LAT/LONG: 33.7339 / -118.0038	CLIENT: Dudek & Associates CONTACT: Khristina Leyba INQUIRY#: 3772583.4 RESEARCH DATE: 10/31/2013

Historical Topographic Map



N	ADJOINING QUAD NAME: CORONA MAP YEAR: 1902 SERIES: 30 SCALE: 1:125000	SITE NAME: Golden West College ADDRESS: 15744 Goldenwest St Huntington Beach, CA 92647 LAT/LONG: 33.7339 / -118.0038	CLIENT: Dudek & Associates CONTACT: Khristina Leyba INQUIRY#: 3772583.4 RESEARCH DATE: 10/31/2013

Historical Topographic Map



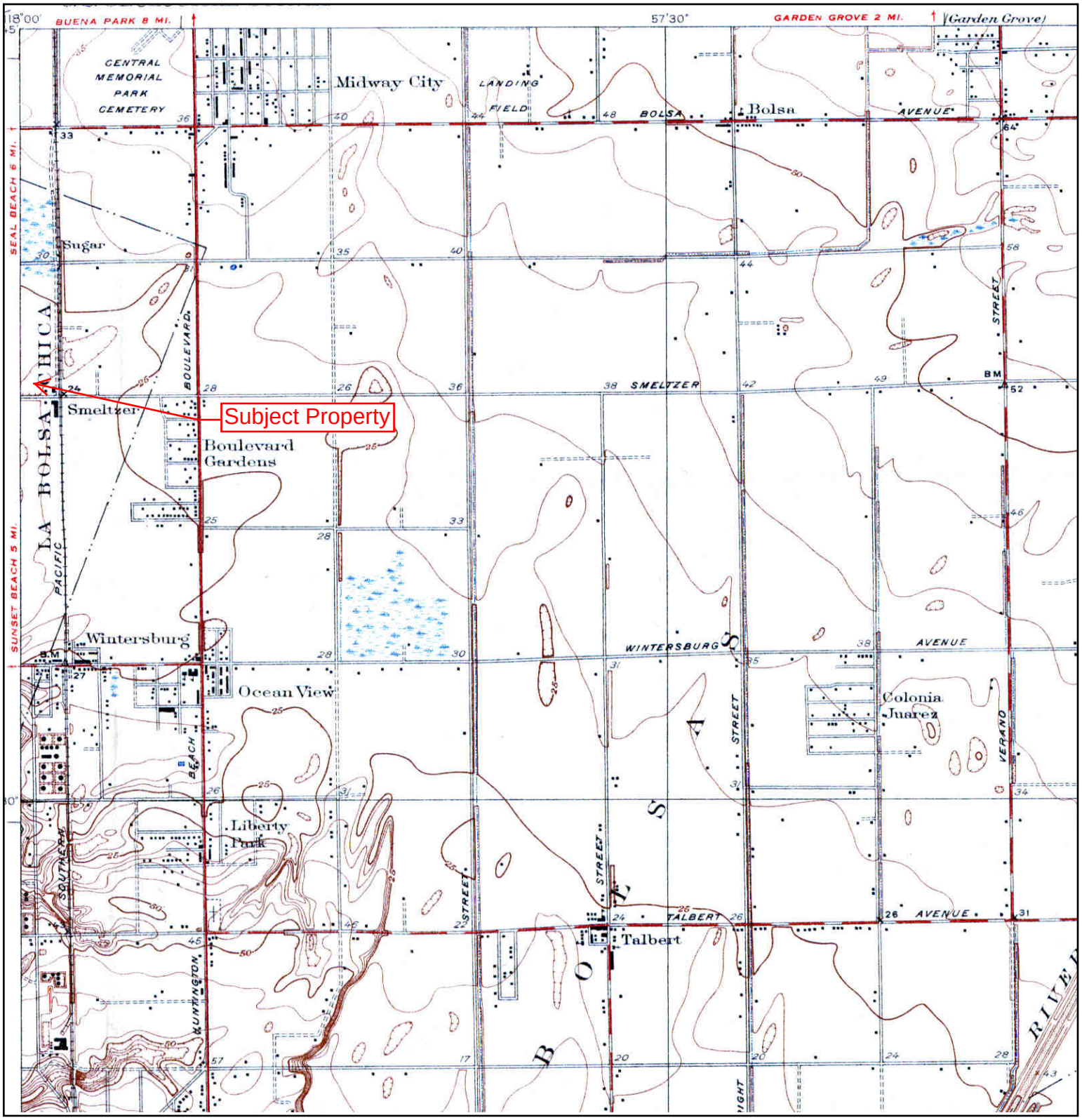
N	TARGET QUAD NAME: LAS BOLSAS MAP YEAR: 1934 SERIES: 15 SCALE: 1:62500	SITE NAME: Golden West College ADDRESS: 15744 Goldenwest St Huntington Beach, CA 92647 LAT/LONG: 33.7339 / -118.0038	CLIENT: Dudek & Associates CONTACT: Khristina Leyba INQUIRY#: 3772583.4 RESEARCH DATE: 10/31/2013

Historical Topographic Map



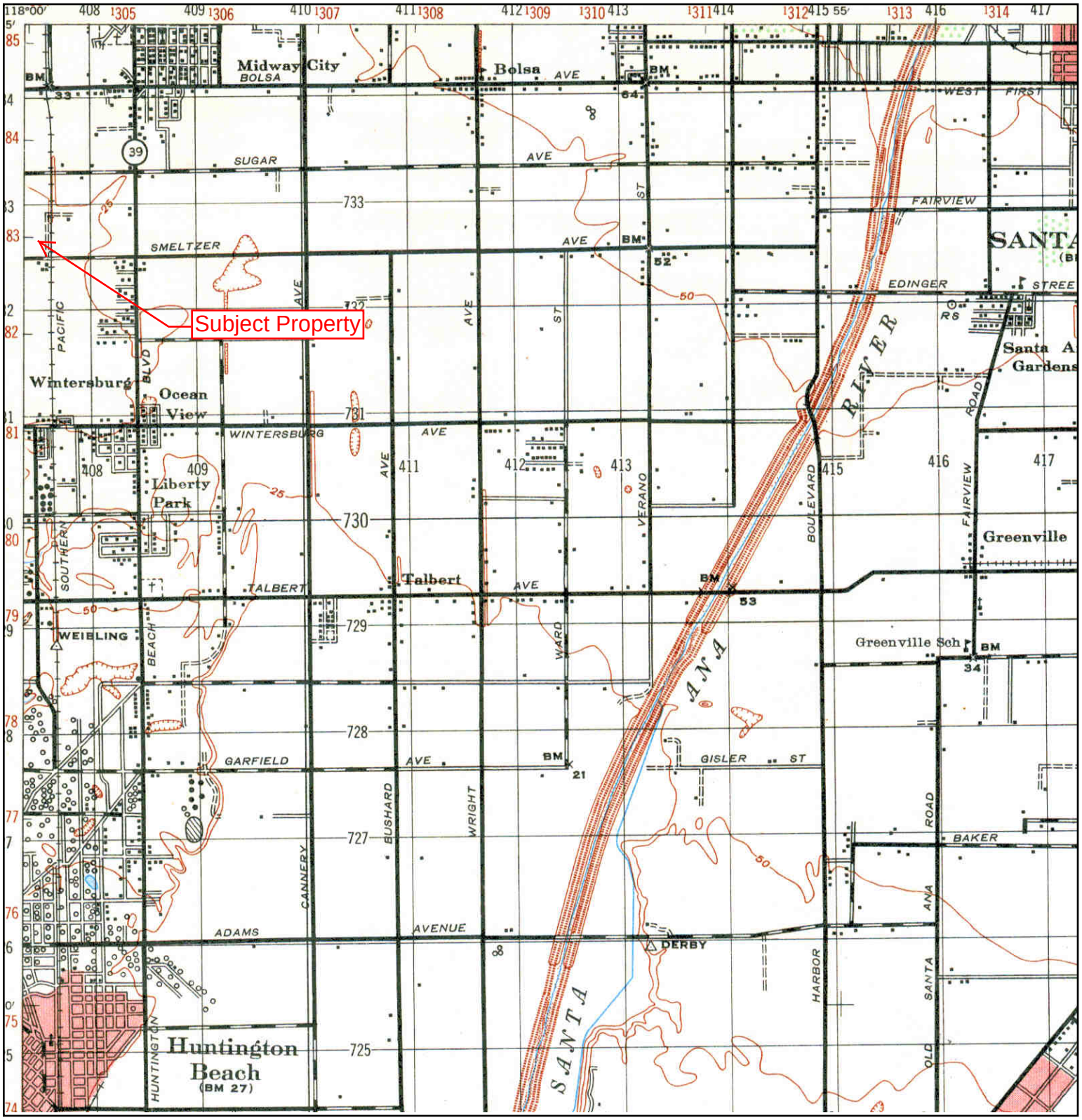
N	TARGET QUAD NAME: SEAL BEACH MAP YEAR: 1935 SERIES: 7.5 SCALE: 1:31680	SITE NAME: Golden West College ADDRESS: 15744 Goldenwest St Huntington Beach, CA 92647 LAT/LONG: 33.7339 / -118.0038	CLIENT: Dudek & Associates CONTACT: Khristina Leyba INQUIRY#: 3772583.4 RESEARCH DATE: 10/31/2013

Historical Topographic Map



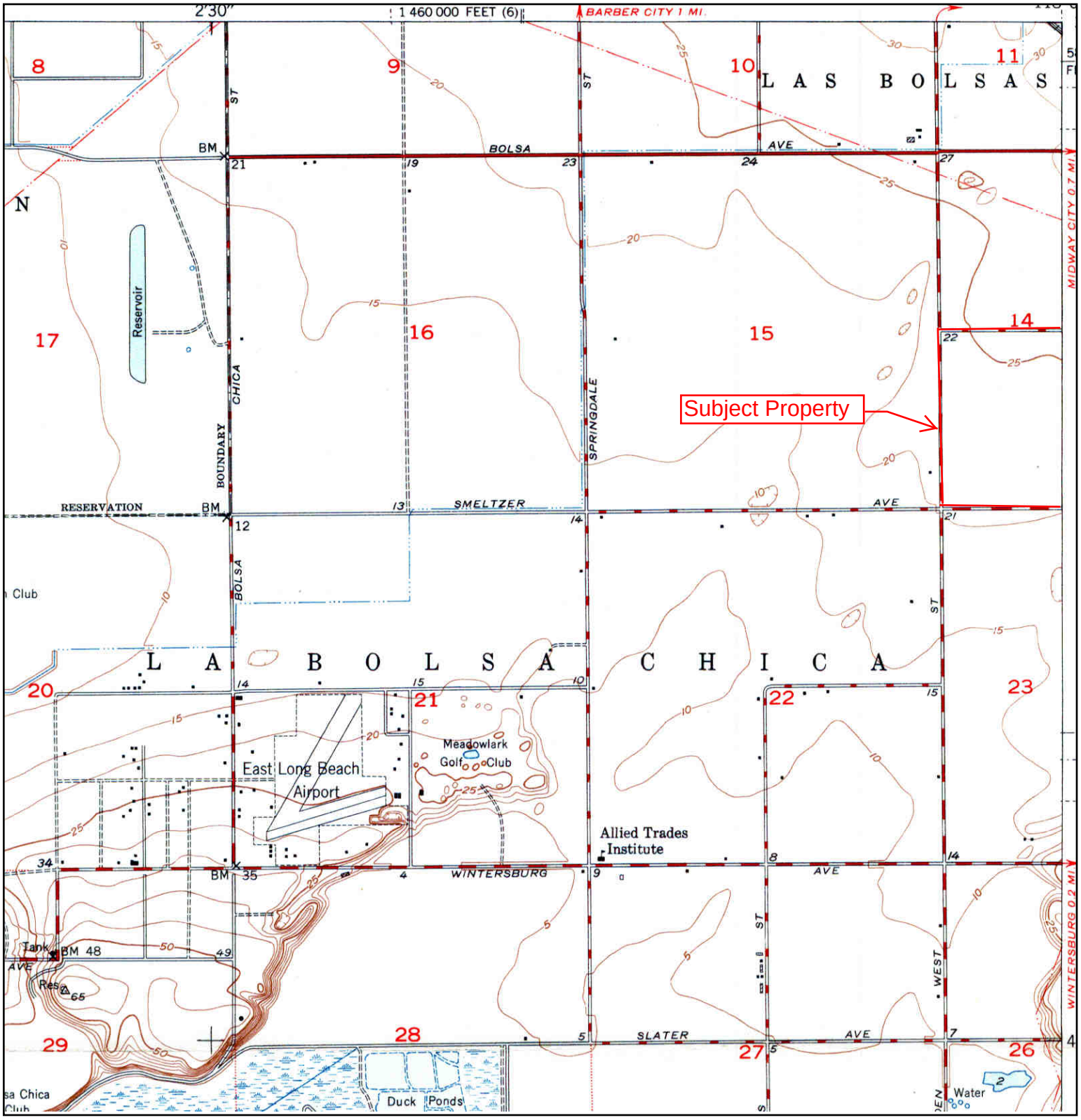
N	ADJOINING QUAD		
	NAME: NEWPORT BEACH	SITE NAME: Golden West College	CLIENT: Dudek & Associates
	MAP YEAR: 1935	ADDRESS: 15744 Goldenwest St	CONTACT: Khristina Leyba
		Huntington Beach, CA 92647	INQUIRY#: 3772583.4
	SERIES: 7.5	LAT/LONG: 33.7339 / -118.0038	RESEARCH DATE: 10/31/2013
	SCALE: 1:31680		

Historical Topographic Map



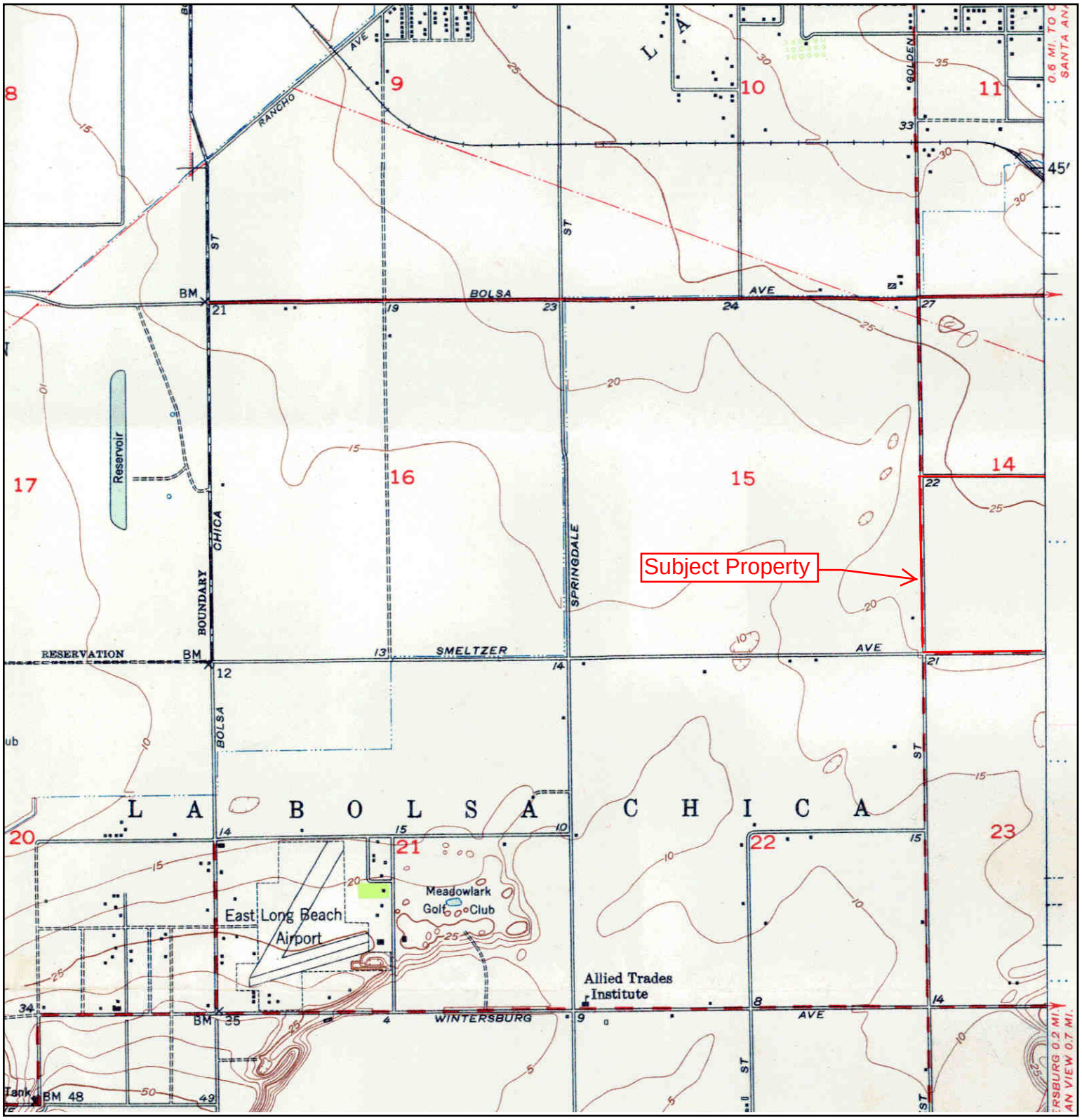
N	ADJOINING QUAD NAME: SANTA ANA MAP YEAR: 1942 SERIES: 15 SCALE: 1:50000	SITE NAME: Golden West College ADDRESS: 15744 Goldenwest St Huntington Beach, CA 92647 LAT/LONG: 33.7339 / -118.0038	CLIENT: Dudek & Associates CONTACT: Khristina Leyba INQUIRY#: 3772583.4 RESEARCH DATE: 10/31/2013

Historical Topographic Map



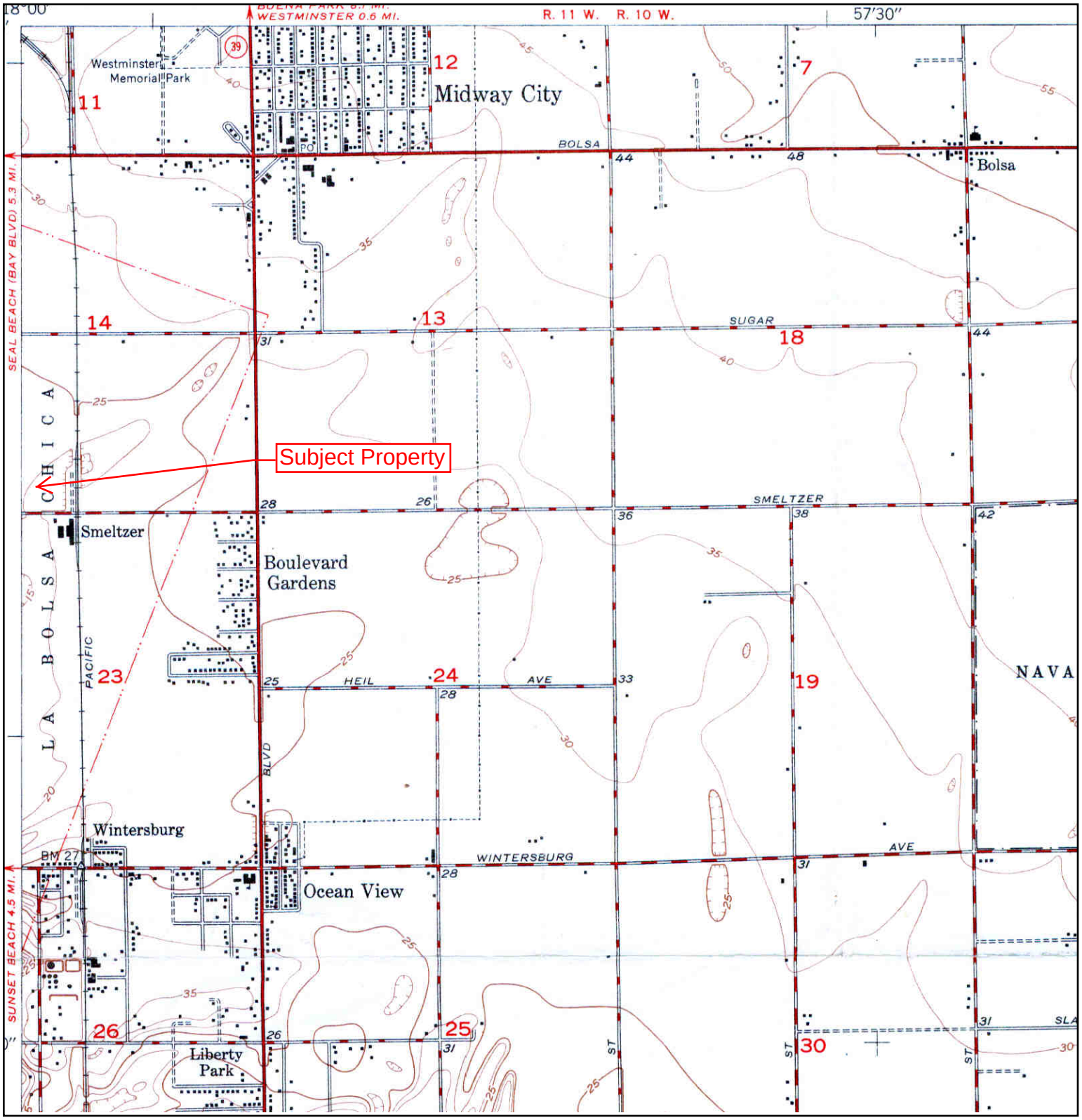
N	TARGET QUAD NAME: SEAL BEACH MAP YEAR: 1950 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Golden West College ADDRESS: 15744 Goldenwest St Huntington Beach, CA 92647 LAT/LONG: 33.7339 / -118.0038	CLIENT: Dudek & Associates CONTACT: Khristina Leyba INQUIRY#: 3772583.4 RESEARCH DATE: 10/31/2013

Historical Topographic Map



N	TARGET QUAD		SITE NAME:	Golden West College	CLIENT: Dudek & Associates
	NAME:	LONGBEACH VICINITY 1OF3	ADDRESS:	15744 Goldenwest St Huntington Beach, CA 92647	CONTACT: Khristina Leyba
	MAP YEAR:	1951	LAT/LONG:	33.7339 / -118.0038	INQUIRY#: 3772583.4
	SERIES:	7.5			RESEARCH DATE: 10/31/2013
	SCALE:	1:24000			

Historical Topographic Map



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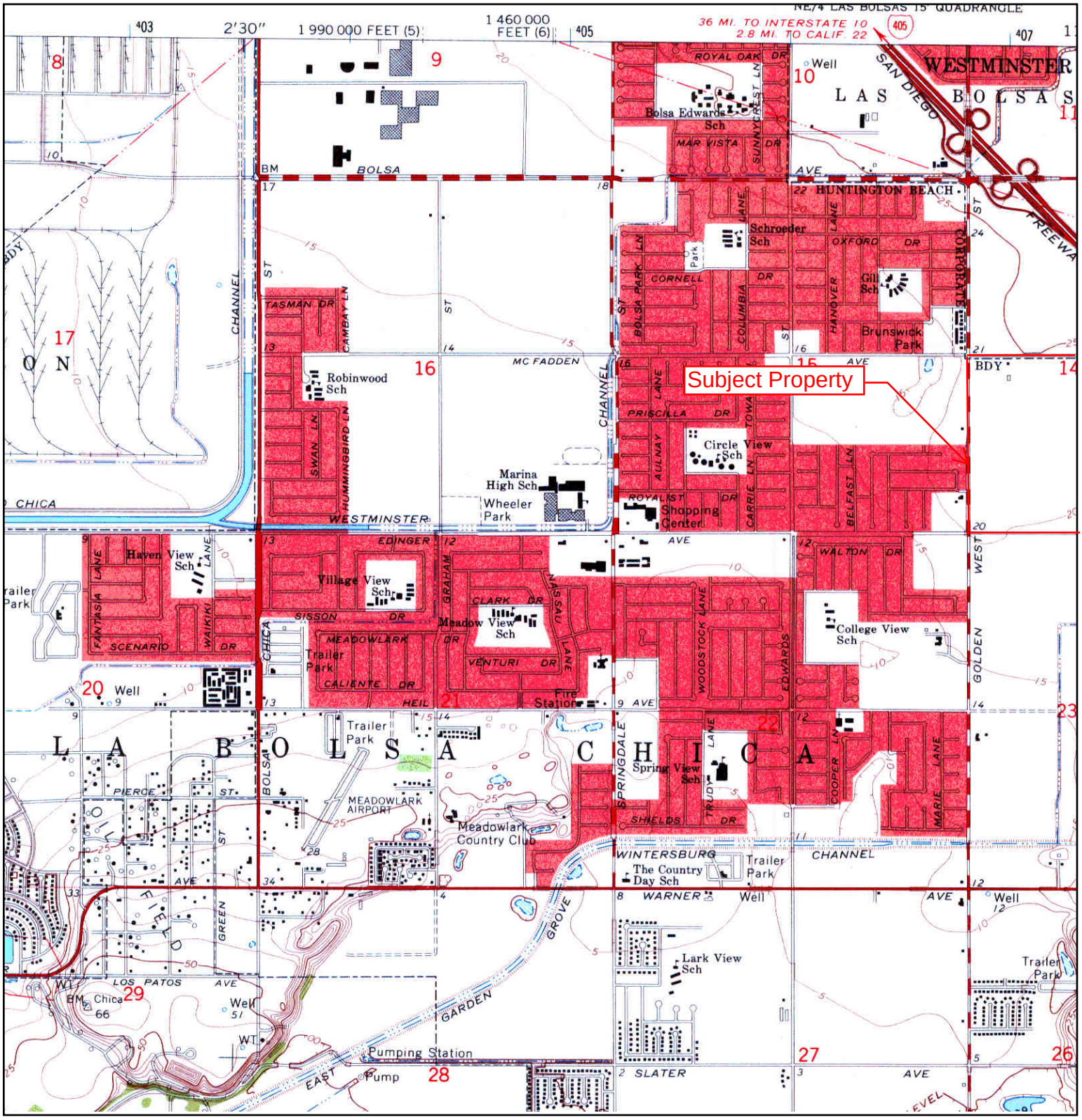

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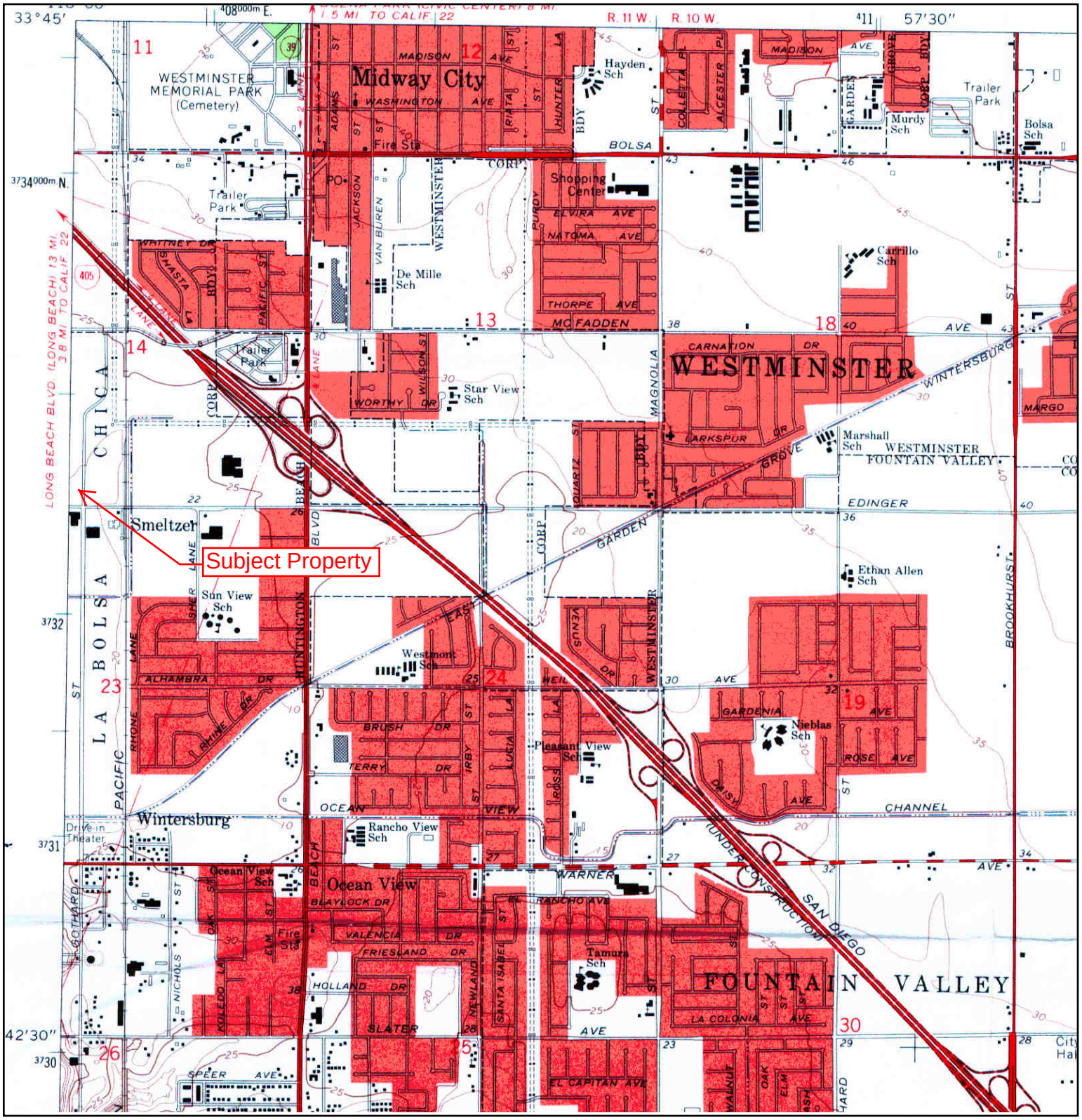

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	MAP YEAR: 1965	ADDRESS: 15744 Goldenwest St	CONTACT: Khristina Leyba
		Huntington Beach, CA 92647	INQUIRY#: 3772583.4
	SERIES: 7.5	LAT/LONG: 33.7339 / -118.0038	RESEARCH DATE: 10/31/2013
	SCALE: 1:24000		

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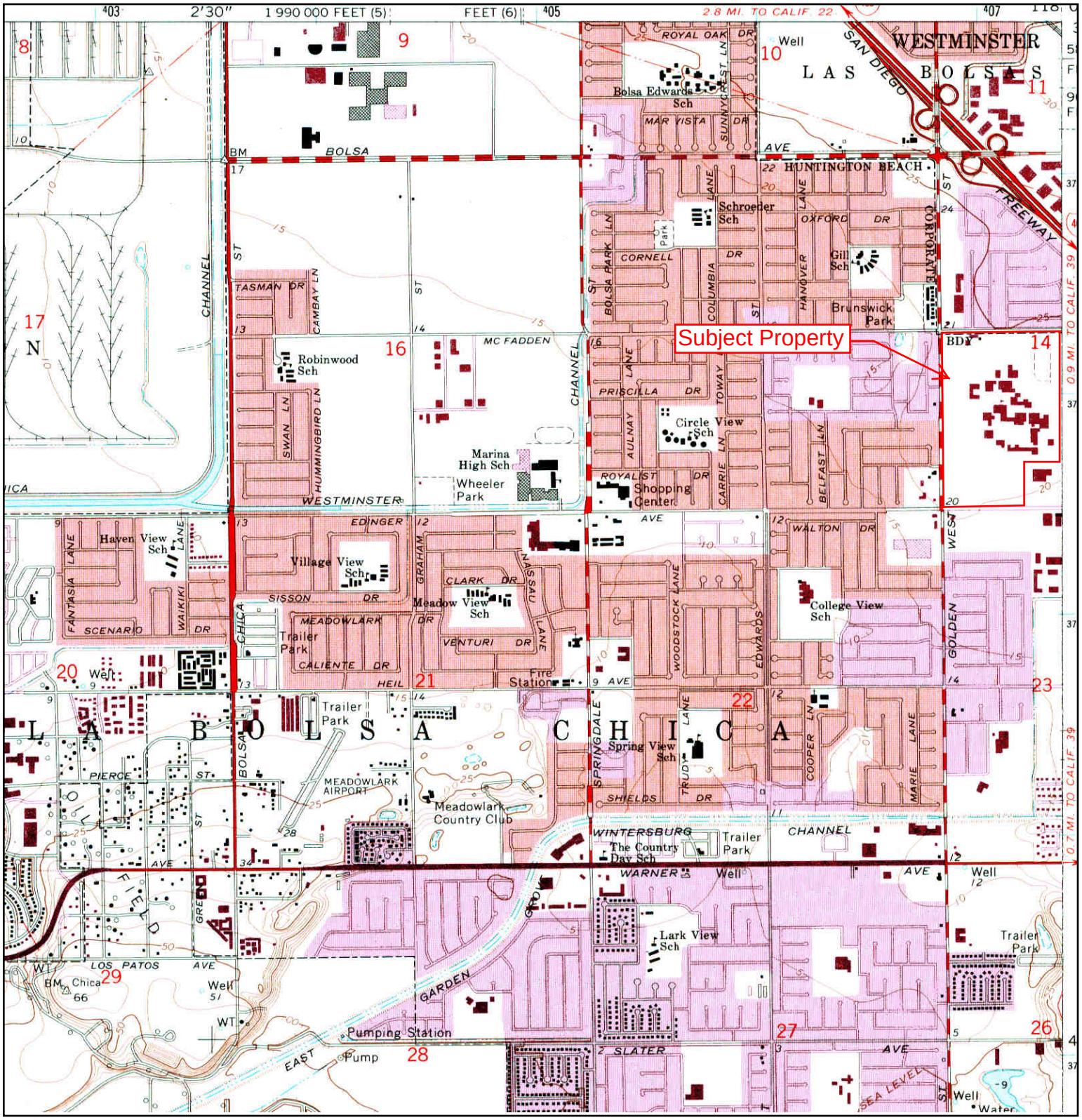

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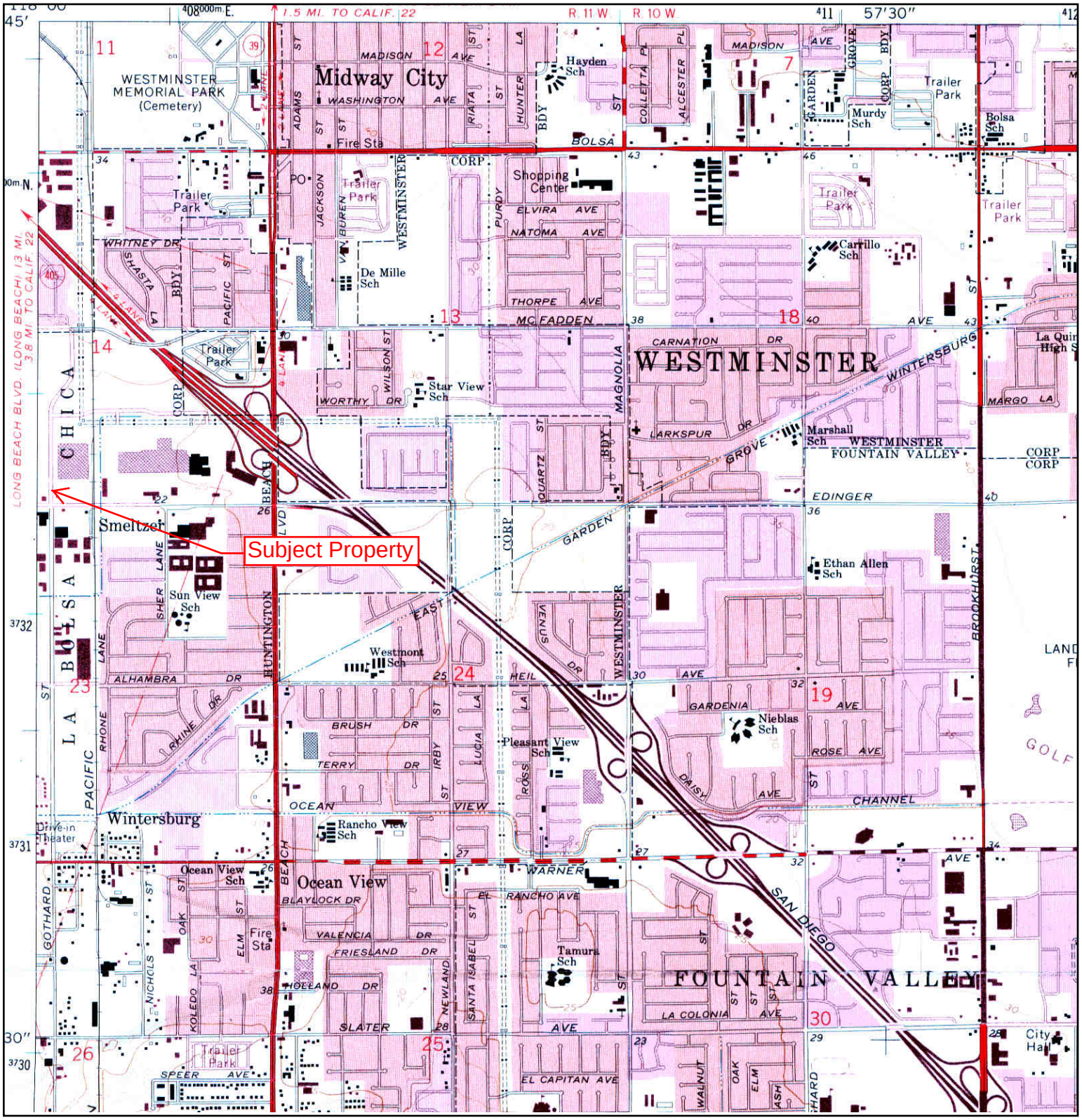

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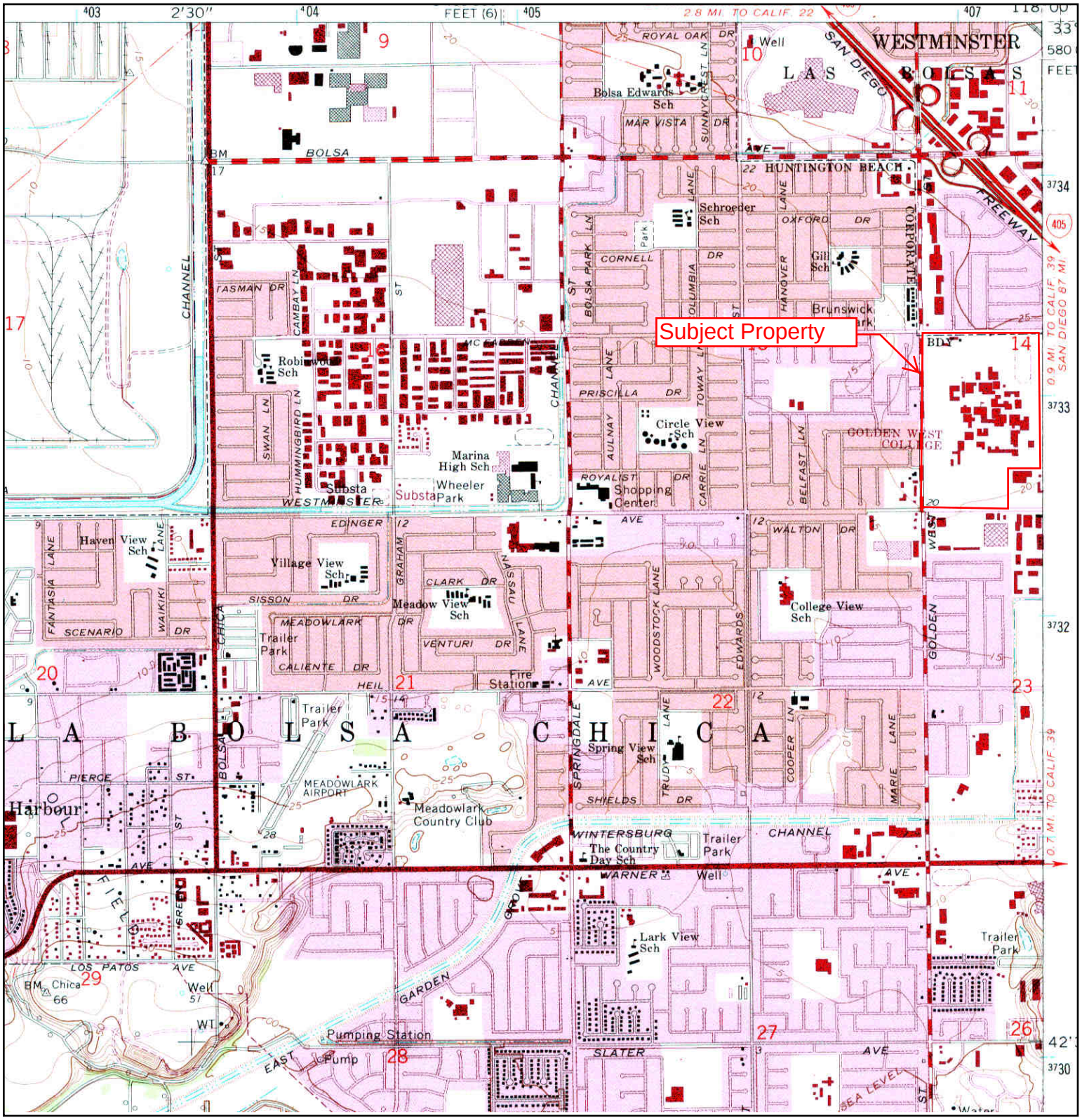

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	NAME:	SEAL BEACH	ADDRESS:	15744 Goldenwest St	CONTACT: Khristina Leyba
	MAP YEAR:	1981		Huntington Beach, CA 92647	INQUIRY#: 3772583.4
	PHOTOREVISED FROM :	1965	LAT/LONG:	33.7339 / -118.0038	RESEARCH DATE: 10/31/2013
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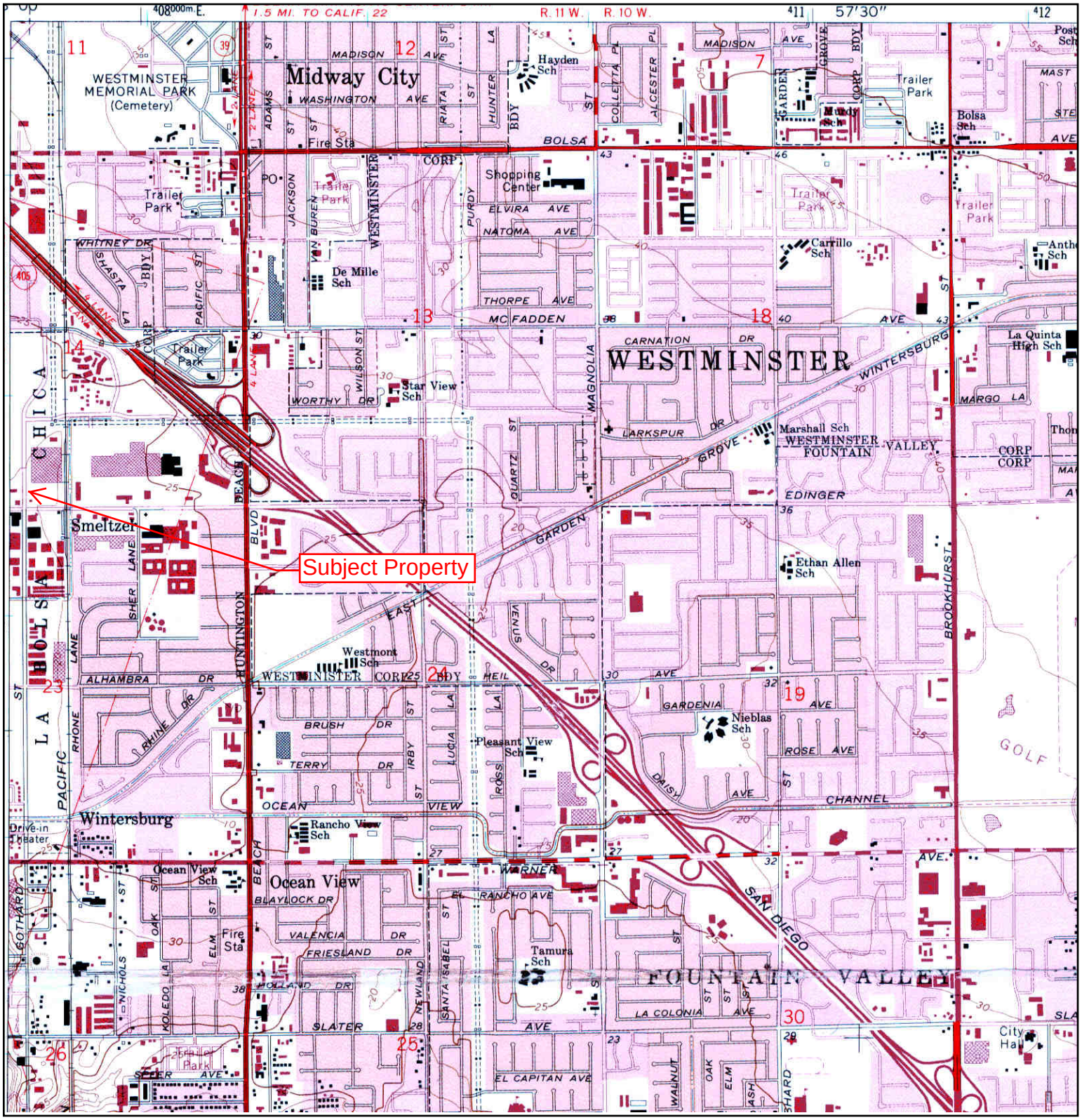

N	ADJOINING QUAD		
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	MAP YEAR: 1981	ADDRESS: 15744 Goldenwest St	CONTACT: Khristina Leyba
	PHOTOREVISED FROM :1965	Huntington Beach, CA 92647	INQUIRY#: 3772583.4
	SERIES: 7.5	LAT/LONG: 33.7339 / -118.0038	RESEARCH DATE: 10/31/2013
	SCALE: 1:24000		

ATTACHMENT E

Sanborn Fire Maps

Golden West College
15744 Goldenwest St
Huntington Beach, CA 92647

Inquiry Number: 3772583.3
October 30, 2013

Certified Sanborn® Map Report

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

10/30/13

Site Name:
Golden West College
15744 Goldenwest St
Huntington Beach, CA 92647

Client Name:
Dudek & Associates
605 Third Street
Encinitas, CA 92024

EDR Inquiry # 3772583.3

Contact: Khristina Leyba

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Certified Sanborn Results:

Site Name: Golden West College
Address: 15744 Goldenwest St
City, State, Zip: Huntington Beach, CA 92647
Cross Street:
P.O. # 7910.0001-3
Project: Golden West College
Certification # 6F90-4B44-9EE6

Sanborn® Library search results
Certification # 6F90-4B44-9EE6

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APPENDIX I

Traffic Impact Analysis

LINSCOTT LAW & GREENSPAN engineers

TRAFFIC IMPACT ANALYSIS REPORT

GOLDEN WEST COLLEGE VISION 2020 FACILITIES MASTER PLAN

Huntington Beach , California
March 31, 2015
(Revision of December 16, 2014 Report)

Prepared for:

DUDEK
31878 Camino Capistrano, Suite 200
San Juan Capistrano, California 92675

LLG Ref. 2-13-3396-2





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TABLE OF CONTENTS

SECTION PAGE

1.0 Introduction 1
1.1 Scope of Work 1
1.2 Study Area 2

2.0 Project Description 4
2.1 Site Access 4

3.0 Existing Conditions 5
3.1 Existing Street System 5
3.2 Existing Traffic Volumes 5
3.3 Existing Intersection Conditions 6
3.3.1 Intersection Capacity Utilization (ICU) Method of Analysis 6
3.3.2 Highway Capacity Manual Method of Analysis (Unsignalized Intersections) 7
3.3.3 Level of Service Criteria 7
3.4 Existing Level of Service Results 8

4.0 Traffic Forecasting Methodology 13

5.0 Project Traffic Characteristics 14
5.1 Project Traffic Generation 14
5.2 Project Traffic Distribution and Assignment 17
5.3 Existing Plus Project Traffic Conditions 17

6.0 Future Traffic Conditions 18
6.1 Ambient Traffic Growth 18
6.2 Cumulative Projects Traffic Characteristics 18
6.3 Year 2024 Cumulative Traffic Volumes 18

7.0 Traffic Impact Analysis Methodology 21
7.1 Impact Criteria and Thresholds 21
7.1.1 City of Huntington Beach 21
7.1.2 City of Westminster 22
7.2 Traffic Impact Analysis Scenarios 22

8.0 Peak Hour Intersection Capacity Analysis 23
8.1 Existing Plus Project Analysis 23
8.1.1 Existing Plus Project Traffic Conditions 23
8.2 Year 2024 Traffic Conditions 23
8.2.1 Year 2024 Cumulative Traffic Conditions 24
8.2.2 Year 2024 Cumulative Plus Project Conditions 24

TABLE OF CONTENTS

SECTION PAGE

9.0 State Of California (Caltrans) Methodology 31
9.1 Highway Capacity Manual (HCM) Method of Analysis (Signalized Intersections) 31
9.2 Existing Plus Project Traffic Conditions 33
9.2.1 Existing Traffic Conditions 33
9.2.2 Existing Plus Project Traffic Conditions 33
9.3 Year 2024 Traffic Conditions 33
9.3.1 Year 2024 Cumulative Traffic Conditions 33
9.3.2 Year 2024 Cumulative Plus Project Traffic Conditions 34

10.0 Recommended Improvements 37
10.1 Existing Plus Project Traffic Conditions 37
10.2 Year 2024 Plus Project Traffic Conditions 37
10.3 Recommended Improvements – Caltrans 38
10.3.1 Existing Plus Project Traffic Conditions – Caltrans 38
10.3.2 Year 2024 Plus Project Traffic Conditions – Caltrans 38

11.0 Summary Of Findings And Conclusions 40

APPENDICES

APPENDIX

A. Existing Traffic Count Data

B. Existing Intersection Level of Service Calculation Worksheets

C. Boys and Girls Club After School Building Trip Generation Table

D. Existing Plus Project Intersection Level of Service Calculation Worksheets

E. Year 2024 Intersection Level of Service Calculation Worksheets

F. Caltrans Intersection Level of Service Calculation Worksheets

LIST OF FIGURES

SECTION—FIGURE #		FOLLOWING PAGE
1-1	Vicinity Map	3
2-1	Existing Site Aerial	4
2-2	Proposed Site Plan	4
3-1	Existing Roadway Conditions and Intersection Controls	6
3-2	Existing AM Peak Hour Traffic Volumes	6
3-3	Existing PM Peak Hour Traffic Volumes	6
5-1	Project Traffic Distribution Pattern – Student Growth	17
5-2	Project Traffic Distribution Pattern – Boys and Girls Club Gymnasium and After School Building	17
5-3	AM Peak Hour Project Traffic Volumes	17
5-4	PM Peak Hour Project Traffic Volumes	17
5-5	Existing Plus Project AM Peak Hour Traffic Volumes	17
5-6	Existing Plus Project PM Peak Hour Traffic Volumes	17
6-1	Location of Cumulative Projects	20
6-2	AM Peak Hour Cumulative Project Traffic Volumes	20
6-3	PM Peak Hour Cumulative Project Traffic Volumes	20
6-4	Year 2024 Cumulative AM Peak Hour Traffic Volumes	20
6-5	Year 2024 Cumulative PM Peak Hour Traffic Volumes	20
6-6	Year 2024 Cumulative Plus Project AM Peak Hour Traffic Volumes	20
6-7	Year 2024 Cumulative Plus Project PM Peak Hour Traffic Volumes	20
10-1	Recommended Existing Plus Project Improvements	39
10-2	Recommended Year 2024 Plus Project Improvements	39
10-3	Recommended Year 2024 Plus Project Improvements – Caltrans	39

LIST OF TABLES

SECTION—TABLE #		PAGE
3-1	Level of Service Criteria For Signalized Intersections	9
3-2	Level of Service Criteria For Unsignalized Intersections	10
3-3	Existing Peak Hour Intersection Capacity Analysis	11-12
5-1	Project Traffic Generation Rates	15
5-2	Project Traffic Generation Forecast	16
6-1	Location and Description of Cumulative Projects	19
6-2	Cumulative Projects Traffic Generation Forecast	20
8-1	Existing Plus Project Peak Hour Intersection Capacity Analysis	25-26
8-2	Year 2024 Peak Hour Intersection Capacity Analysis	27-29
9-1	Level of Service Criteria For Signalized Intersections (HCM Methodology)	32
9-2	Existing Plus Project Peak Hour Intersection Capacity Analysis - Caltrans	35
9-3	Year 2024 Peak Hour Intersection Capacity Analysis - Caltrans	36

TRAFFIC IMPACT ANALYSIS REPORT

GOLDEN WEST COLLEGE VISION 2020 FACILITIES MASTER PLAN

Huntington Beach, California
March 31, 2015
(Revision of December 16, 2014 Report)

1.0 INTRODUCTION

This Traffic Impact Analysis report addresses the potential traffic impacts associated with the proposed Golden West College Vision 2020 Facilities Master Plan (hereinafter referred to as Project). The approximately 109-acre project site is bounded by McFadden Avenue to the north, Gothard Street to the east, Edinger Avenue to the south and Goldenwest Street to the west in the City of Huntington Beach, California. The proposed Project will generally consist of the construction of new campus facilities and the renovation of existing campus facilities to meet the District's instructional needs and to accommodate growth in the student body over the planning horizon and beyond for in-district students and out-of-district students. In addition to the new and/or renovated instructional space, the proposed Project will also consist of the construction of the Boys and Girls Club after school building and the construction of the Boys and Girls Club gymnasium facilities.

1.1 Scope of Work

This traffic report documents the findings and recommendations of a traffic impact analysis conducted by Linscott, Law & Greenspan, Engineers (LLG) to determine the potential impacts associated with the proposed Project. The traffic analysis evaluates the existing operating conditions at twenty six (26) key study intersections within the project vicinity, estimates the trip generation potential of the proposed Project, superimposes the project-related traffic volumes on the circulation system as it currently exists and forecasts future operating conditions without and with the proposed Project. Where necessary, intersection improvements/mitigation measures are identified.

The project site has been visited and an inventory of adjacent area roadways and intersections was performed. Existing peak hour traffic information has been collected at twenty six (26) key study locations on a "typical" weekday for use in the preparation of intersection level of service calculations. A "typical" weekday constitutes a Tuesday, Wednesday or Thursday and refers to a non-holiday condition when local schools are in session. Information concerning cumulative projects (planned and/or approved) in the vicinity of the proposed Project has been researched at the City of Huntington Beach and the City of Westminster. Based on our research, there are seven (7) cumulative projects located in the City of Huntington Beach and eight (8) cumulative projects located in the City of Westminster. These fifteen (15) cumulative projects were considered in the cumulative traffic analysis for this project.

This traffic report satisfies the traffic impact requirements of the City of Huntington Beach and is consistent with the most current *Congestion Management Program (CMP) for Orange County.* This traffic report analyzes existing and future weekday AM peak hour and PM peak hour traffic

conditions for a near-term (Year 2024) traffic setting upon completion of the proposed Project. Peak hour traffic forecasts for the Year 2024 horizon year have been projected by increasing existing traffic volumes by an annual growth rate of two percent (2.0%) per year and adding traffic volumes generated by fifteen (15) cumulative projects.

1.2 Study Area

A total of twenty six (26) locations have been selected for evaluation based on review of the existing transportation system surrounding the proposed Project site. Of the 26 identified locations, twenty four are located within the City of Huntington Beach and two are located within the City of Westminster (i.e. No. 3: Goldenwest Street/I-405 SB Ramps and No. 24: Beach Boulevard/McFadden Avenue). Further, of this total, fourteen (14) locations are arterial street signalized intersections, three (3) locations are arterial street/project access point signalized intersections and nine (9) locations are project access point unsignalized intersections. The twenty six (26) locations listed below provide regional and local access to the study area and define the extent of the boundaries for this traffic impact investigation. The jurisdiction where each key study intersection is located is also identified with the following nomenclature utilized; HB = City of Huntington Beach and WM = City of Westminster.

Key Study Intersections

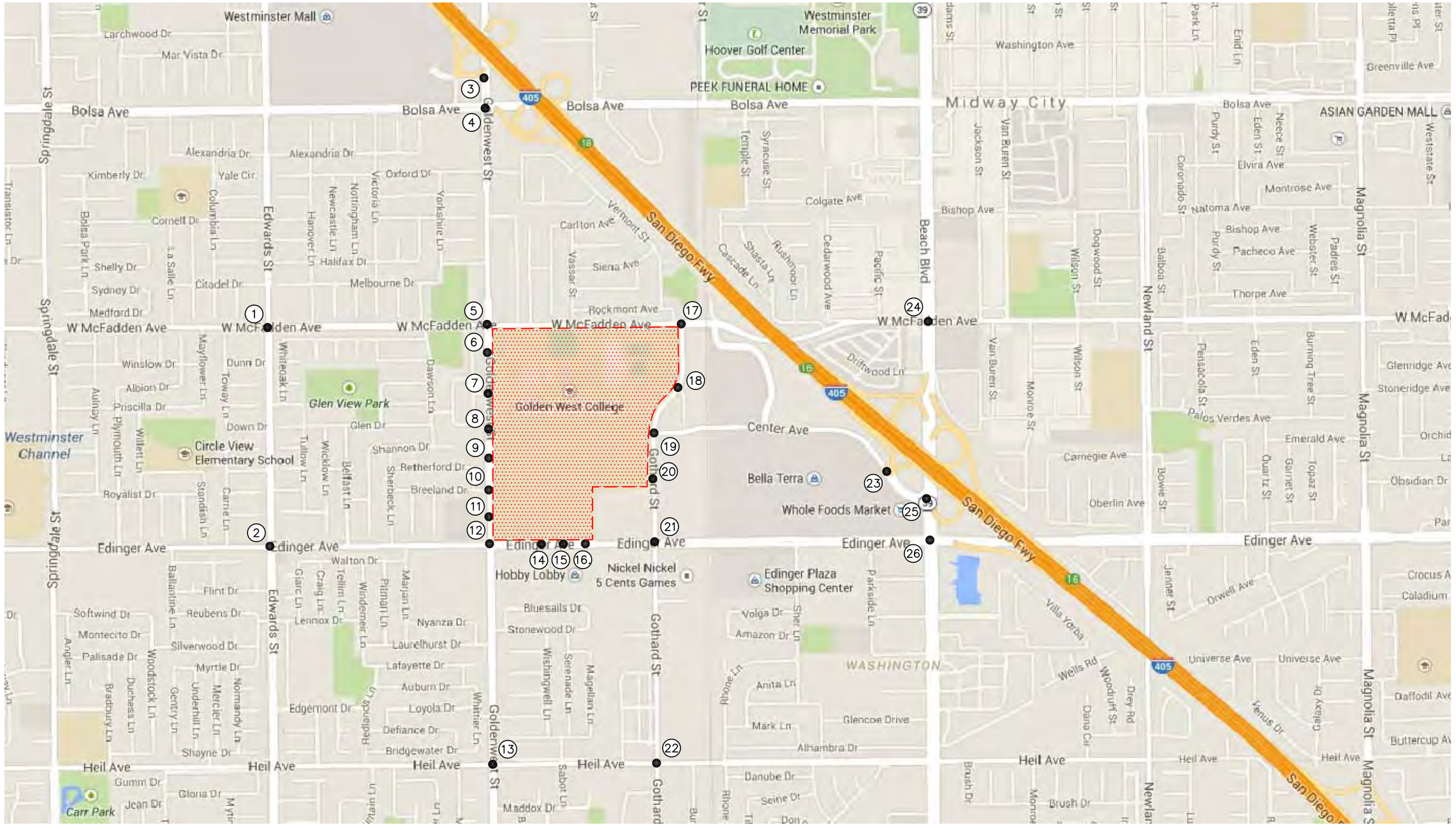
1. Edwards Street at McFadden Avenue (HB)
2. Edwards Street at Edinger Avenue (HB)
3. Goldenwest St at I-405 SB Ramps (WM)
4. Goldenwest Street at Bolsa Avenue (HB)
5. Goldenwest Street at McFadden Ave (HB)
6. Goldenwest St at Driveway No. 12 (HB)
7. Goldenwest St at Driveway No. 11 (HB)
8. Goldenwest St at Driveway No. 10 (HB)
9. Goldenwest Street at Driveway No. 9 (HB)
10. Goldenwest Street at Driveway No. 8 (HB)
11. Goldenwest Street at Driveway No. 7 (HB)
12. Goldenwest Street at Edinger Avenue (HB)
13. Goldenwest Street at Heil Avenue (HB)
14. Driveway No. 6 at Edinger Avenue (HB)
15. Driveway No. 5 at Edinger Avenue (HB)
16. Driveway No. 4 at Edinger Avenue (HB)
17. Vermont St/Gothard St at McFadden Ave (HB)
18. Gothard Street at Driveway No. 1 (HB)
19. Gothard St at Driveway No. 2/Center Ave (HB)
20. Gothard Street at Driveway No. 3 (HB)
21. Gothard Street at Edinger Avenue (HB)
22. Gothard Street at Heil Avenue (HB)
23. I-405 SB Ramps at Center Avenue (HB)
24. Beach Boulevard at McFadden Avenue (WM)
25. Beach Boulevard at Center Avenue (HB)
26. Beach Boulevard at Edinger Avenue (HB)[1]

Figure 1-1 presents a Vicinity Map, which illustrates the general location of the Project and depicts the study locations and surrounding street system. The Volume-Capacity (V/C) and Level of Service (LOS) investigations at these key locations were used to evaluate the potential traffic-related impacts associated with area growth, cumulative projects and the proposed Project. When necessary, this report recommends intersection improvements that may be required to accommodate future traffic volumes and restore/maintain an acceptable Level of Service, and/or mitigate the impact of the project.

[1] Orange County Congestion Management Program (CMP) intersection.

Included in this Traffic Impact Analysis are:

- Existing traffic counts,
- Estimated project traffic generation/distribution/assignment,
- Estimated cumulative project traffic generation/distribution/assignment,
- AM and PM peak hour capacity analyses for existing conditions,
- AM and PM peak hour capacity analyses for existing plus project conditions,
- AM and PM peak hour capacity analyses for future near-term (Year 2024) traffic conditions without and with the proposed Project,
- Caltrans Evaluation, and
- Recommended Improvements.



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LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

SOURCE: GOOGLE

KEY

(#) = STUDY INTERSECTION

= PROJECT SITE

FIGURE 1-1

VICINITY MAP

GOLDEN WEST COLLEGE VISION 2020 FACILITIES MASTER PLAN, HUNTINGTON BEACH

2.0 PROJECT DESCRIPTION

The approximately 109-acre project site is bounded by McFadden Avenue to the north, Gothard Street to the east, Edinger Avenue to the south and Goldenwest Street to the west in the City of Huntington Beach, California. ***Figure 2-1*** presents an aerial depiction of the existing site.

Figure 2-2 presents the proposed site plan for the proposed Project, which shows the locations of the proposed renovations and new construction. As shown, the proposed Project will consist of the construction of new campus facilities and the renovation of existing campus facilities to meet the District's instructional needs and to accommodate growth in the student body over the planning horizon and beyond for in-district students and out-of-district students. In addition to the new and/or renovated instructional space, the proposed Project will also consist of the construction of the Boys and Girls Club after school building and the construction of the Boys and Girls Club gymnasium facilities.

In order to facilitate the development of trip generation forecasts for the proposed Project, the aforementioned project description has been divided amongst two categories. The two categories consist of development related to 1) student growth and 2) the Boys and Girls Club after school building and gymnasium facilities project. All project components are expected to be completed by the Year 2024. The following describes the two categories in detail.

Student Growth

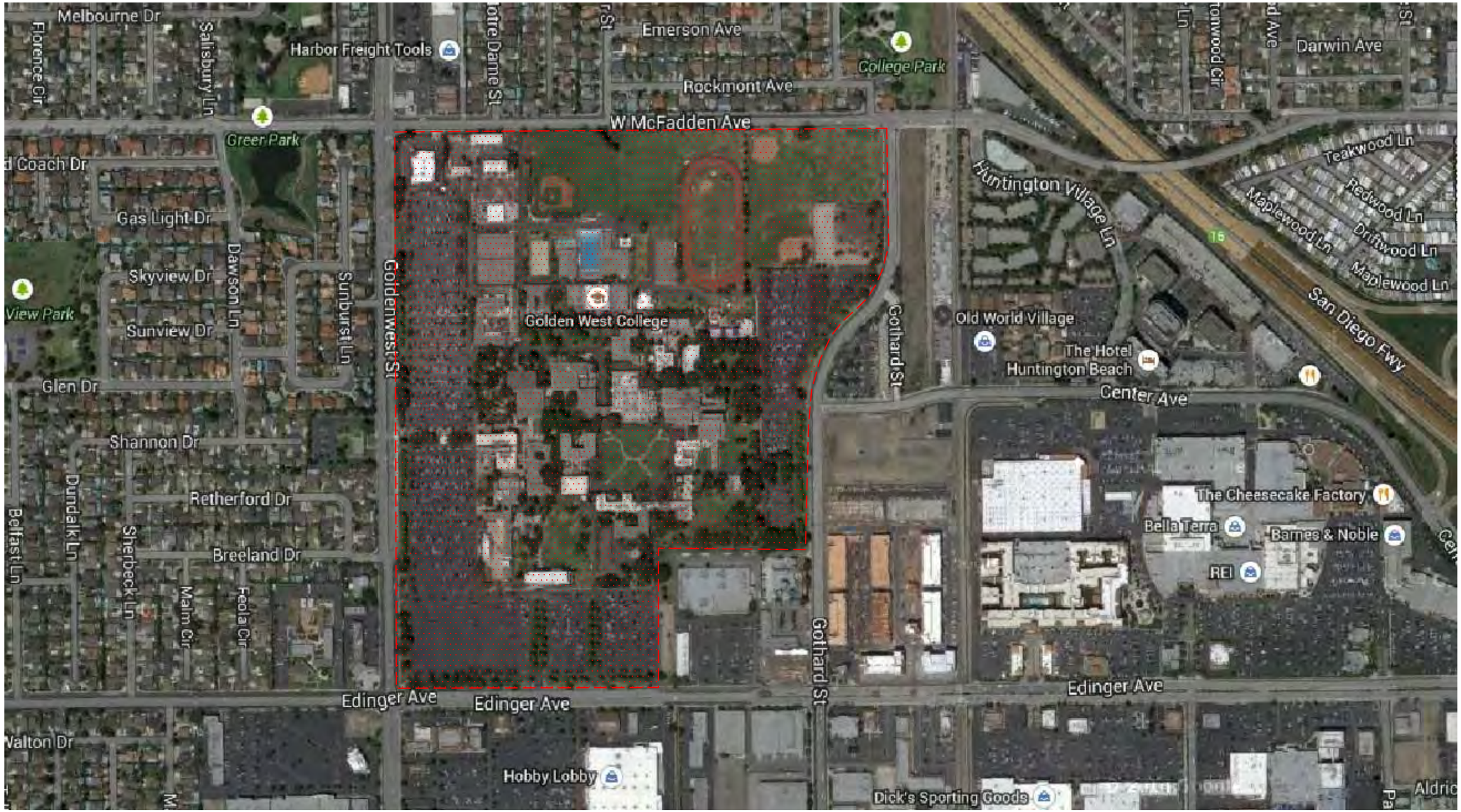
Golden West College has a current student enrollment of 12,746 students. As stated above, the renovation of existing campus facilities and the construction of new campus facilities are required to meet the District's instructional needs and to accommodate growth in the student body for in-district students and out-of-district students. At completion of the Master Plan, Golden West College is projected to accommodate a future student enrollment of 15,391 students, resulting in a net increase of 2,645 students.

Boys and Girls Club After School Building and Gymnasium Facilities

As shown in *Figure 2-2*, the Boys and Girls Club after school building and gymnasium facilities project component will be generally located west of Gothard Street and south of the athletic fields (i.e. proposed campus land uses #42 and #50). The Boys and Girls Club after school building will consist of an approximately 14,990 square foot (SF) facility for up to 225 students and the Boys and Girls Club gymnasium facilities will total 9,794 SF. It should be noted that youth leagues may run 2-3 days per week between 6:00 PM and 8:00 PM within the gymnasium. As provided by Boys and Girls Club administration staff, a total of two games per evening may be played and each team would have a maximum of 8 youth members. In order to provide a conservative analysis, the possible use of the gymnasium by the youth leagues is assumed in this traffic impact analysis report.

2.1 Site Access

Vehicular access to the campus would continue to be provided from Goldenwest Street, Edinger Avenue and Gothard Street. The vehicular entries from Goldenwest Street, Edinger Avenue and Gothard Street would be enhanced with the addition of marked pedestrian drop-off zones.



SOURCE: GOOGLE

KEY

= PROJECT SITE

LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

FIGURE 2–1

EXISTING SITE AERIAL

GOLDEN WEST COLLEGE VISION 2020 FACILITIES MASTER PLAN, HUNTINGTON BEACH

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SOURCE: GOLDEN WEST COLLEGE

LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

FIGURE 2-2

PROPOSED SITE PLAN

GOLDEN WEST COLLEGE VISION 2020 FACILITIES MASTER PLAN, HUNTINGTON BEACH

n:\3300\2133396 - coast community college district, orange county\3396-2 golden west college\dwg\3396-2 f2-2.dwg LDP 15:00:4 12-11-2014 aguilar

3.0 EXISTING CONDITIONS

3.1 Existing Street System

The principal local network of streets serving the project site are Goldenwest Street, Gothard Street, McFadden Avenue and Edinger Avenue. The following discussion provides a brief synopsis of these key area streets. The descriptions are based on an inventory of existing roadway conditions.

Goldenwest Street is generally a six-lane, divided roadway, oriented in the north-south direction. Goldenwest Street borders the project site to the west and currently provides access to the site via one signalized driveway and five unsignalized driveways. The posted speed limit on Goldenwest Street is 45 miles per hour (mph). On-street parking is generally not permitted along this roadway in the vicinity of the project. Traffic signals control the study intersections of Goldenwest Street at the I-405 SB Ramps, Bolsa Avenue, McFadden Avenue, Driveway No. 9 (Golden West College), Edinger Avenue and Heil Avenue.

Gothard Street is generally a four-lane, divided roadway, oriented in the north-south direction. Gothard Street borders the project site to the east and currently provides access to the site via one signalized driveway located directly opposite Center Avenue and two unsignalized driveways. The posted speed limit on Gothard Street is 40 mph. On-street parking is generally not permitted along this roadway in the vicinity of the project. Traffic signals control the study intersections of Gothard Street at McFadden Avenue, Driveway No. 2/Center Avenue, Edinger Avenue and Heil Avenue.

McFadden Avenue is generally a four-lane, divided roadway, oriented in the east-west direction, which borders the project site to the north. The posted speed limit on McFadden Avenue is 45 mph west of Goldenwest Street and 40 mph east of Goldenwest Street. On-street parking is generally not permitted along this roadway in the vicinity of the project. Traffic signals control the study intersections of McFadden Avenue at Edwards Street, Goldenwest Street, Vermont Street/Gothard Street and Beach Boulevard.

Edinger Avenue is generally a six-lane, divided roadway, oriented in the east-west direction. Edinger Avenue borders the project site to the south and currently provides access to the site via one signalized driveway and two unsignalized driveways. The posted speed limit on Edinger Avenue is 45 mph west of Goldenwest Street and 40 mph east of Goldenwest Street. On-street parking is generally not permitted along this roadway in the vicinity of the project. Traffic signals control the study intersections of Edinger Avenue at Edwards Street, Goldenwest Street, Driveway No. 6 (Golden West College), Gothard Street and Beach Boulevard.

Figure 3-1 presents an inventory of the existing roadway conditions for the arterials and intersections evaluated in this report. This figure identifies the number of travel lanes for key arterials, as well as intersection configurations and controls for the key area study intersections.

3.2 Existing Traffic Volumes

Twenty six (26) key study intersections have been identified as the locations at which to evaluate existing and future traffic operating conditions. Some portion of potential project-related traffic will

pass through each of these intersections, and their analysis will reveal the expected relative impacts of the project. Existing AM peak hour and PM peak hour traffic volumes for the twenty six (26) key study intersections evaluated in this report were obtained from manual turning movement counts conducted by Transportation Studies Inc. in October 2013 and November 2013. Since the campus driveways/access points are included in the list of twenty six intersections (26) where traffic data was collected, the traffic data at these locations was utilized to establish the existing daily, AM Peak hour and PM peak hour trip generation for the campus. The existing trip generation represents an existing baseline enrollment of 12,746 students.

Figures 3-2 and ***3-3*** illustrate the existing AM and PM peak hour traffic volumes at the twenty six (26) key study intersections evaluated in this report, respectively. ***Appendix A*** contains the detailed peak hour count sheets for the key intersections evaluated in this report and contains a summary of the existing daily, AM peak hour and PM peak hour trip generation for the campus.

3.3 Existing Intersection Conditions

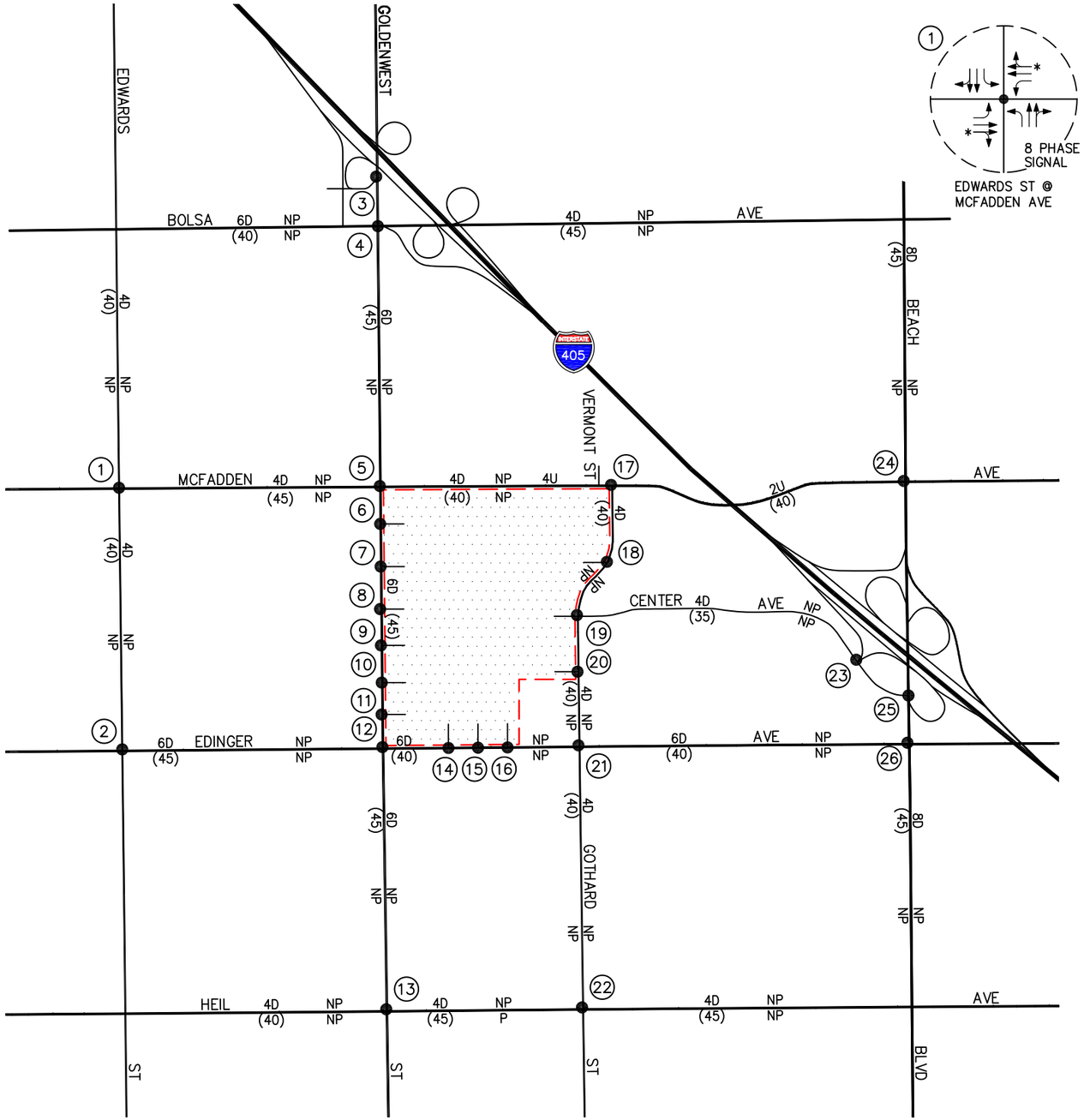
Existing AM and PM peak hour operating conditions for the twenty six (26) key study intersections were evaluated using the *Intersection Capacity Utilization* (ICU) methodology for signalized intersections and the methodology outlined in Chapter 17 of the *Highway Capacity Manual 2000* (HCM2000) for unsignalized intersections.

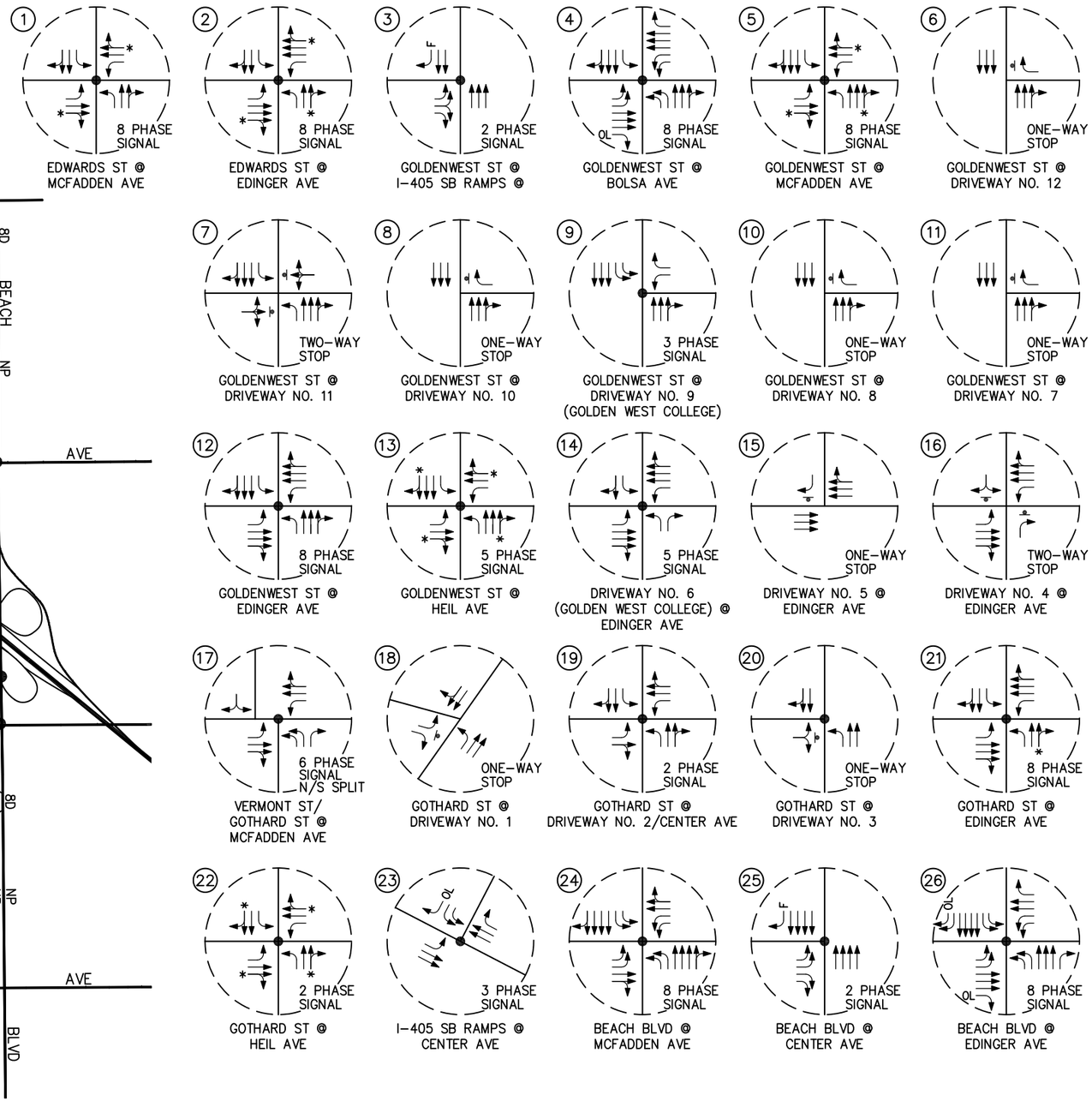
3.3.1 *Intersection Capacity Utilization (ICU) Method of Analysis*

In conformance with City of Huntington Beach and Orange County CMP requirements, existing AM and PM peak hour operating conditions for the key signalized study intersections were evaluated using the Intersection Capacity Utilization (ICU) method. The ICU technique is intended for signalized intersection analysis and estimates the volume to capacity (V/C) relationship for an intersection based on the individual V/C ratios for key conflicting traffic movements. The ICU numerical value represents the percent signal (green) time, and thus capacity, required by existing and/or future traffic. It should be noted that the ICU methodology assumes uniform traffic distribution per intersection approach lane and optimal signal timing.

Per City of Huntington Beach requirements, the ICU calculations use a lane capacity of 1,700 vehicles per hour (vph) for left-turn, through, and right-turn lanes. A clearance adjustment factor of 0.05 was added to each Level of Service calculation. For the two signalized study intersections located in the City of Westminster (i.e. Goldenwest Street/I-405 SB Ramps and Beach Boulevard/McFadden Avenue), the ICU calculations also use a lane capacity of 1,700 vehicles per hour (vph) for left-turn lanes, through lanes and right-turn lanes. A clearance adjustment factor of 0.05 was added to each Level of Service calculation.

The ICU value translates to a Level of Service (LOS) estimate, which is a relative measure of the intersection performance. The ICU value is the sum of the critical volume to capacity ratios at an intersection; it is not intended to be indicative of the LOS of each of the individual turning movements. The six qualitative categories of Level of Service have been defined along with the corresponding ICU value range and are shown in ***Table 3-1***.





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LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

KEY

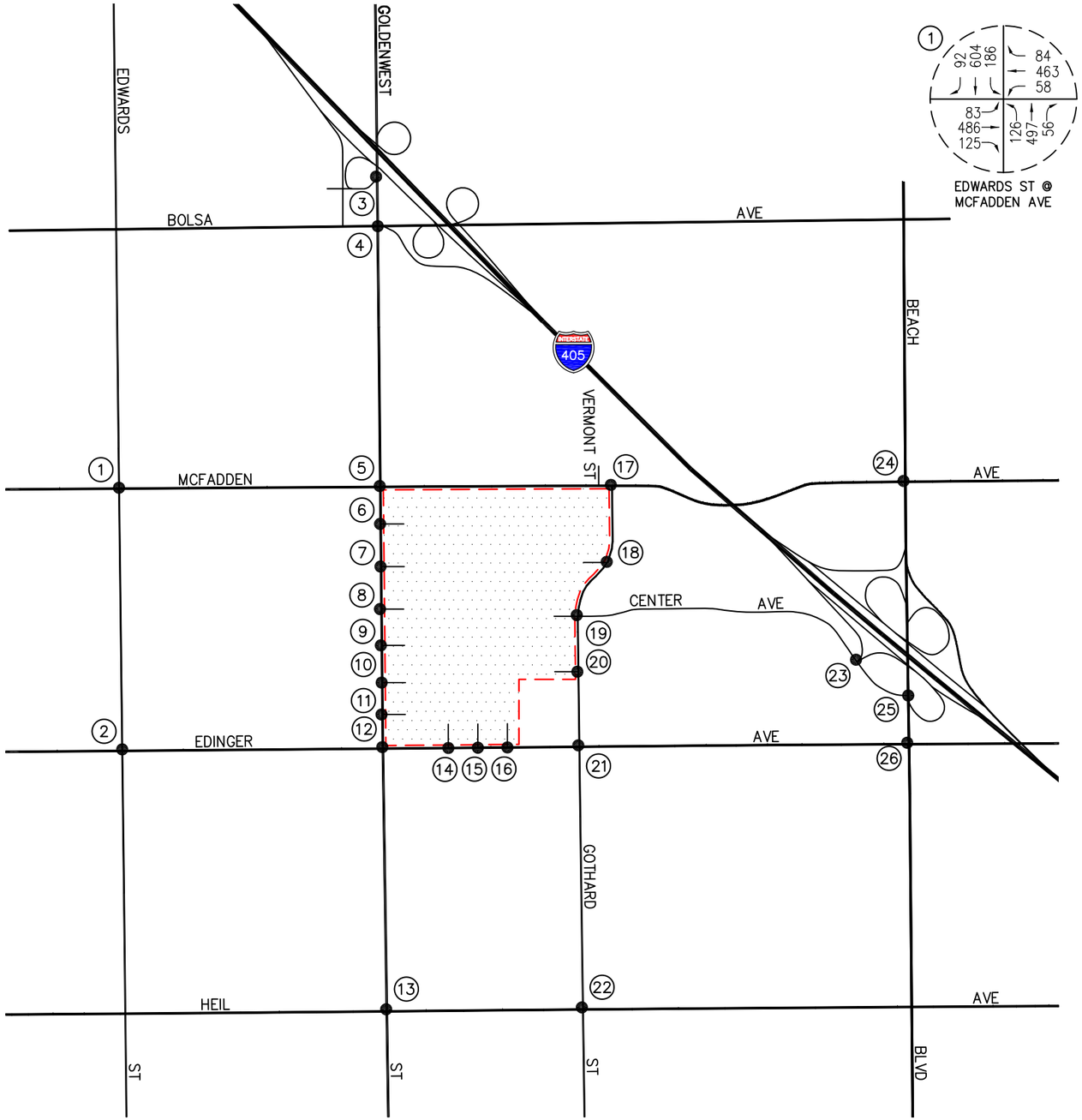
(#) = STUDY INTERSECTION
= APPROACH LANE ASSIGNMENT
● = TRAFFIC SIGNAL, ▾ = STOP SIGN
P = PARKING, NP = NO PARKING
U = UNDIVIDED, D = DIVIDED
* = DEFACTO RIGHT-TURN LANE

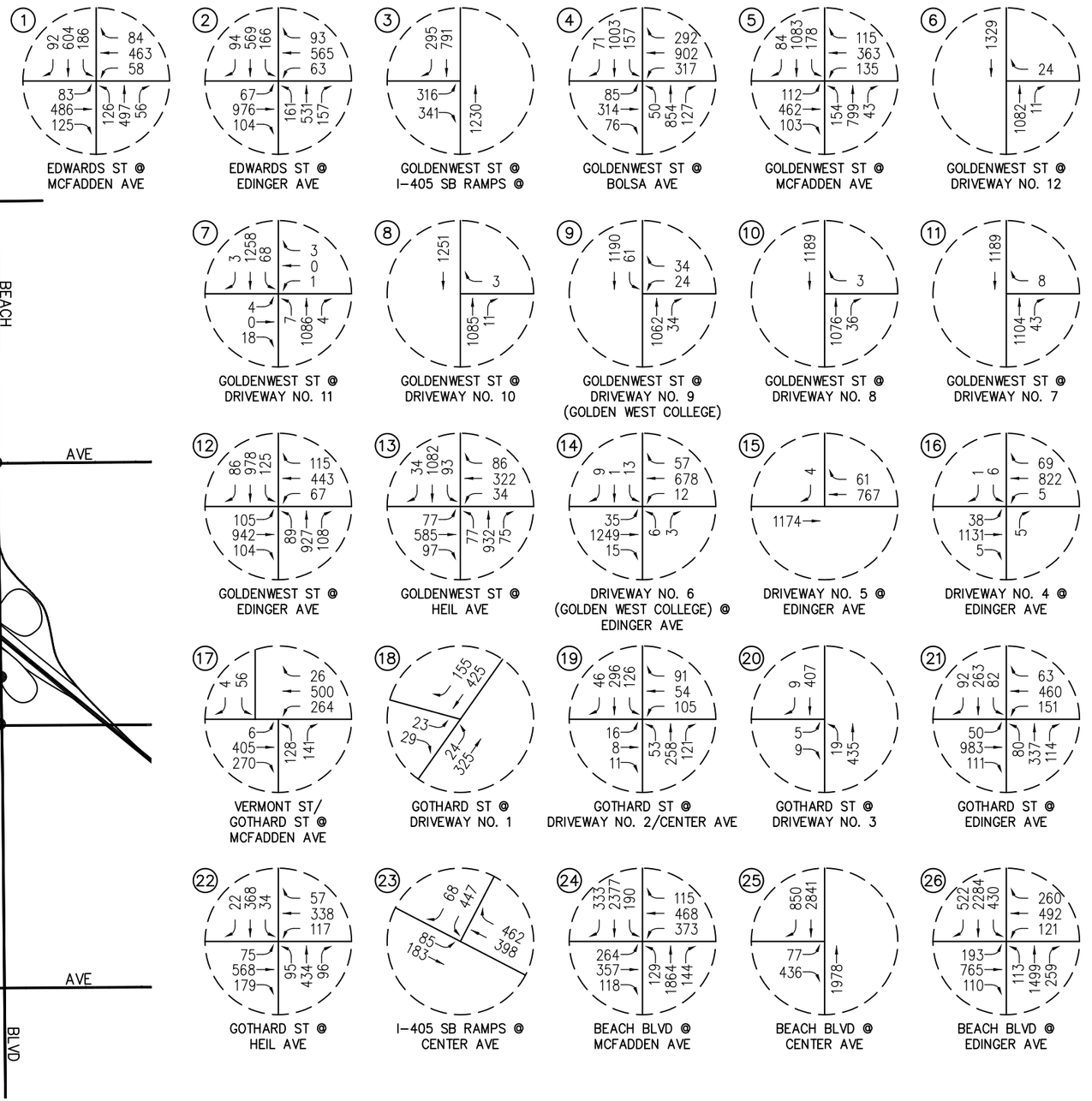
2 = NUMBER OF TRAVEL LANES
(XX) = POSTED SPEED LIMIT (MPH)
F = FREE-RIGHT
OL = OVERLAP
= PROJECT SITE

FIGURE 3-1

EXISTING ROADWAY CONDITIONS AND INTERSECTION CONTROLS

GOLDEN WEST COLLEGE VISION 2020 FACILITIES MASTER PLAN, HUNTINGTON BEACH





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LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

KEY

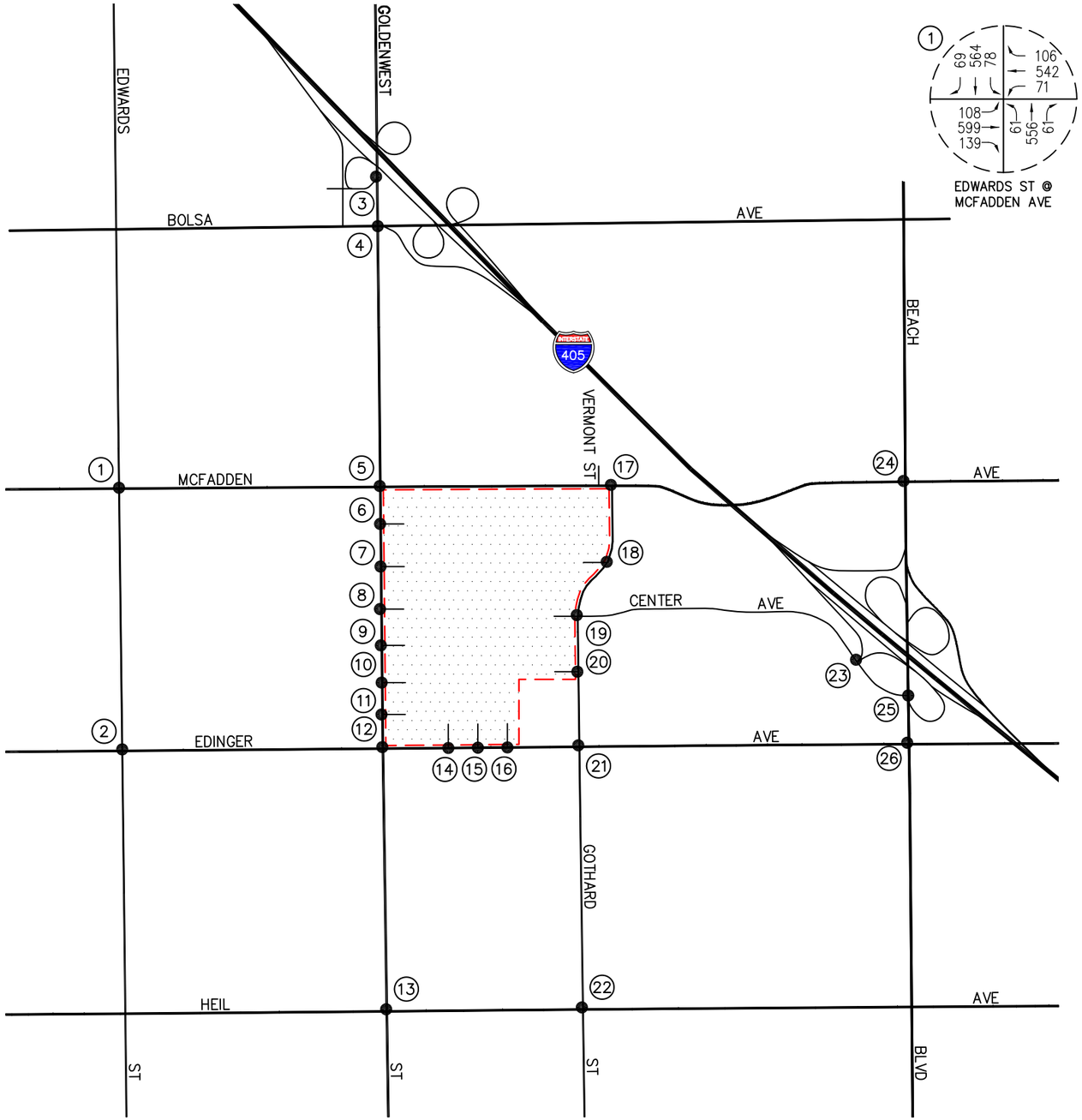
(#) = STUDY INTERSECTION

= PROJECT SITE

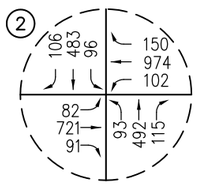
FIGURE 3-2

EXISTING AM PEAK HOUR TRAFFIC VOLUMES

GOLDEN WEST COLLEGE VISION 2020 FACILITIES MASTER PLAN, HUNTINGTON BEACH



EDWARDS ST @
MCFADDEN AVE



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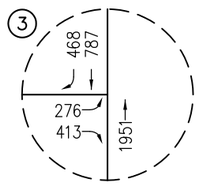
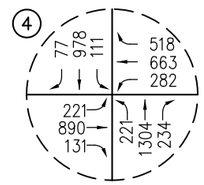
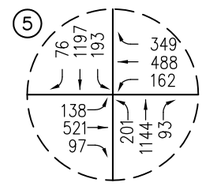
EDINGER AVE



GOLDENWEST ST @
I-405 SB RAMPS @



GOLDENWEST ST @
BOLSA AVE



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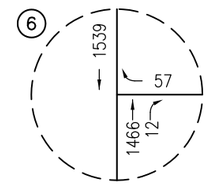
MCFADDEN AVE



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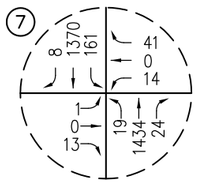

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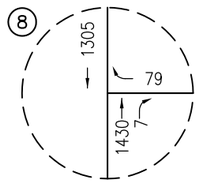

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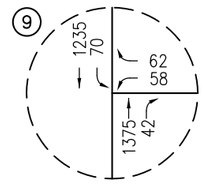
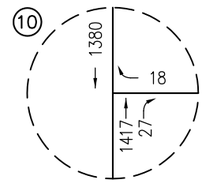
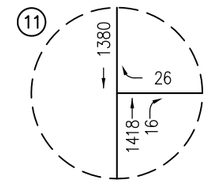


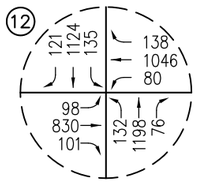
GOLDENWEST ST @
DRIVEWAY NO. 9
(GOLDEN WEST COLLEGE)



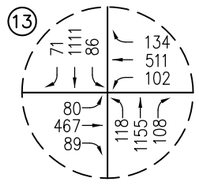
GOLDENWEST ST @
DRIVEWAY NO. 8



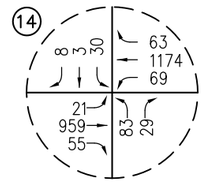
GOLDENWEST ST @
DRIVEWAY NO. 7



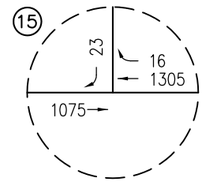
GOLDENWEST ST @
EDINGER AVE



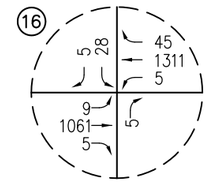
GOLDENWEST ST @
HEIL AVE



DRIVEWAY NO. 6
(GOLDEN WEST COLLEGE) @
EDINGER AVE



DRIVEWAY NO. 5 @
EDINGER AVE



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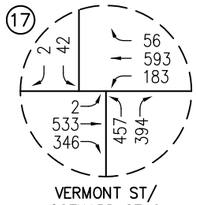
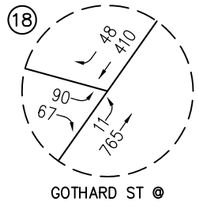
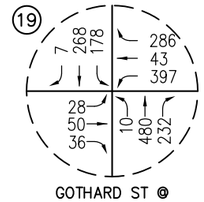
EDINGER AVE



VERMONT ST/
GOTHARD ST @
MCFADDEN AVE



GOTHARD ST @
DRIVEWAY NO. 1



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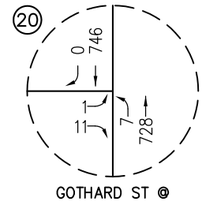
DRIVEWAY NO. 2/CENTER AVE



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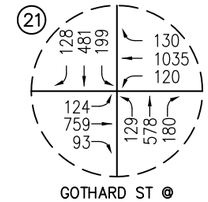

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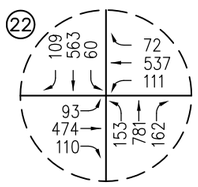
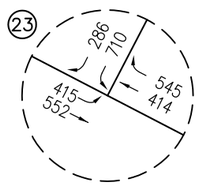
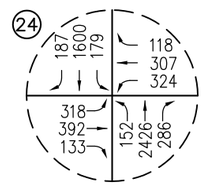


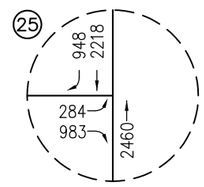
GOTHARD ST @
HEIL AVE



I-405 SB RAMPS @
CENTER AVE



BEACH BLVD @
MCFADDEN AVE



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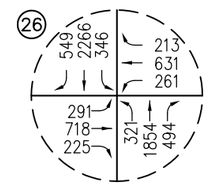
CENTER AVE



BEACH BLVD @
EDINGER AVE

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LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

KEY

(#) = STUDY INTERSECTION

= PROJECT SITE

FIGURE 3-3

EXISTING PM PEAK HOUR TRAFFIC VOLUMES

GOLDEN WEST COLLEGE VISION 2020 FACILITIES MASTER PLAN, HUNTINGTON BEACH

3.3.2 *Highway Capacity Manual (HCM) Method of Analysis (Unsignalized Intersections)*

The 2000 HCM unsignalized methodology for stop-controlled intersections was utilized for the analysis of the unsignalized intersections. This methodology estimates the average control delay for each of the subject movements and determines the level of service for each movement. For all-way stop controlled intersections, the overall average control delay measured in seconds per vehicle, and level of service is then calculated for the entire intersection. For one-way and two-way stop-controlled (minor street stop-controlled) intersections, this methodology estimates the worst side street delay, measured in seconds per vehicle and determines the level of service for that approach. The HCM control delay value translates to a Level of Service (LOS) estimate, which is a relative measure of the intersection performance. The six qualitative categories of Level of Service have been defined along with the corresponding HCM control delay value range, as shown in ***Table 3-2***.

3.3.3 *Level of Service Criteria*

According to the City of Huntington Beach, LOS C is the minimum acceptable condition that should be maintained during the peak commute hours for "Secondary Intersections". LOS D is the minimum acceptable condition that should be maintained during the peak commute hours for "Principal Intersections", and LOS E is the minimum acceptable condition that should be maintained during the peak commute hours for "Critical Intersections". According to the City of Westminster, LOS D is the minimum acceptable condition that should be maintained at all key intersections during the peak commute hours. Based on the above, the following summarizes the LOS required for each key study intersection:

LOS "C" Requirements	
1. Edwards Street at McFadden Avenue	19. Gothard Street at Dwy No. 2/Center Ave
2. Edwards Street at Edinger Avenue	20. Gothard Street at Driveway No. 3
13. Goldenwest Street at Heil Avenue	21. Gothard Street at Edinger Avenue
17. Vermont St/Gothard St at McFadden Avenue	22. Gothard Street at Heil Avenue
18. Gothard Street at Driveway No. 1	
LOS "D" Requirements	
3. Goldenwest Street at I-405 SB Ramps	11. Goldenwest Street at Driveway No. 7
4. Goldenwest Street at Bolsa Avenue	12. Goldenwest Street at Edinger Avenue
5. Goldenwest Street at McFadden Avenue	14. Driveway No. 6 at Edinger Avenue
6. Goldenwest Street at Driveway No. 12	15. Driveway No. 5 at Edinger Avenue
7. Goldenwest Street at Driveway No. 11	16. Driveway No. 4 at Edinger Avenue
8. Goldenwest Street at Driveway No. 10	23. I-405 SB Ramps at Center Avenue
9. Goldenwest Street at Driveway No. 9	24. Beach Boulevard at McFadden Avenue
10. Goldenwest Street at Driveway No. 8	25. Beach Boulevard at Center Avenue
LOS "E" Requirements	
26. Beach Boulevard at Edinger Avenue	

3.4 Existing Level of Service Results

Table 3-3 summarizes the existing peak hour service level calculations for the twenty six (26) key study intersections based on existing traffic volumes and current street geometrics. Review of *Table 3-3* indicates that two (2) of the twenty six (26) key study intersections currently operate at an unacceptable LOS during the AM and/or PM peak hours. The remaining twenty four (24) key study intersections currently operate at an acceptable level of service during the AM and PM peak hours. The intersections operating at an adverse level of service are:

	AM Peak Hour		PM Peak Hour	
Key Intersection	ICU/HCM	LOS	ICU/HCM	LOS
7. Goldenwest Street at Driveway No. 11	---	---	222.4 s/v	F
16. Driveway No. 4 at Edinger Avenue	35.3 s/v	E	102.9 s/v	F

Appendix B presents the existing ICU/LOS and HCM/LOS calculation worksheets for the twenty six (26) key study intersections for the AM peak hour and PM peak hour.

TABLE 3-1

LEVEL OF SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS

Level of Service (LOS)	Intersection Capacity Utilization Value (V/C)	Level of Service Description
A	≤ 0.600	EXCELLENT. No vehicle waits longer than one red light, and no approach phase is fully used.
B	0.601 – 0.700	VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.
C	0.701 – 0.800	GOOD. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	0.801 – 0.900	FAIR. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
E	0.901 – 1.000	POOR. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	> 1.000	FAILURE. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Potentially very long delays with continuously increasing queue lengths.

TABLE 3-2

LEVEL OF SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS[2]

Level of Service (LOS)	Highway Capacity Manual Delay Value (sec/veh)	Level of Service Description
A	≤ 10.0	Little or no delay
B	> 10.0 and ≤ 15.0	Short traffic delays
C	> 15.0 and ≤ 25.0	Average traffic delays
D	> 25.0 and ≤ 35.0	Long traffic delays
E	> 35.0 and ≤ 50.0	Very long traffic delays
F	> 50.0	Severe congestion

[2] Source: *Highway Capacity Manual 2000*, Chapter 17 (Unsignalized Intersections).

TABLE 3-3

EXISTING PEAK HOUR INTERSECTION CAPACITY ANALYSIS

Key Intersection		Time Period	Minimum Acceptable LOS	Control Type	ICU/HCM	LOS
1.	Edwards Street at McFadden Avenue (HB)	AM PM	LOS C	8∅ Traffic Signal	0.507 0.495	A A
2.	Edwards Street at Edinger Avenue (HB)	AM PM	LOS C	8∅ Traffic Signal	0.568 0.517	A A
3.	Goldenwest Street at I-405 SB Ramps (WM)	AM PM	LOS D	2∅ Traffic Signal	0.420 0.568	A A
4.	Goldenwest Street at Bolsa Avenue (HB)	AM PM	LOS D	8∅ Traffic Signal	0.537 0.787	A C
5.	Goldenwest Street at McFadden Avenue (HB)	AM PM	LOS D	8∅ Traffic Signal	0.585 0.704	A C
6.	Goldenwest Street at Driveway No. 12 (HB)	AM PM	LOS D	One-Way Stop	10.9 s/v 12.7 s/v	B B
7.	Goldenwest Street at Driveway No. 11 (HB)	AM PM	LOS D	Two-Way Stop	25.8 s/v **222.4 s/v**	D **F**
8.	Goldenwest Street at Driveway No. 10 (HB)	AM PM	LOS D	One-Way Stop	10.7 s/v 12.9 s/v	B B
9.	Goldenwest Street at Driveway No. 9 (HB)	AM PM	LOS D	3∅ Traffic Signal	0.303 0.385	A A
10.	Goldenwest Street at Driveway No. 8 (HB)	AM PM	LOS D	One-Way Stop	10.8 s/v 12.0 s/v	B B
11.	Goldenwest Street at Driveway No. 7 (HB)	AM PM	LOS D	One-Way Stop	10.9 s/v 12.0 s/v	B B
12.	Goldenwest Street at Edinger Avenue (HB)	AM PM	LOS D	8∅ Traffic Signal	0.571 0.669	A B
13.	Goldenwest Street at Heil Avenue (HB)	AM PM	LOS C	5∅ Traffic Signal	0.500 0.535	A A

Notes:

- **Bold ICU/LOS** or **HCM/LOS** values indicate adverse service levels based on City of Huntington Beach and City of Westminster LOS standards
- sec/veh = seconds per vehicle
- HB = City of Huntington Beach and WM = City of Westminster

TABLE 3-3 (CONTINUED)
EXISTING PEAK HOUR INTERSECTION CAPACITY ANALYSIS

Key Intersection		Time Period	Minimum Acceptable LOS	Control Type	ICU/HCM	LOS
14.	Driveway No. 6 at Edinger Avenue (HB)	AM PM	LOS D	5∅ Traffic Signal	0.313 0.360	A A
15.	Driveway No. 5 at Edinger Avenue (HB)	AM PM	LOS D	One-Way Stop	10.1 s/v 11.6 s/v	B B
16.	Driveway No.4 at Edinger Avenue (HB)	AM PM	LOS D	Two-Way Stop	**35.3 s/v** **102.9 s/v**	**E** **F**
17.	Vermont St/Gothard St at McFadden Avenue (HB)	AM PM	LOS C	6∅ Traffic Signal	0.522 0.674	A B
18.	Gothard Street at Driveway No. 1 (HB)	AM PM	LOS C	One-Way Stop	11.1 s/v 12.2 s/v	B B
19.	Gothard Street at Driveway No. 2/Center Ave (HB)	AM PM	LOS C	2∅ Traffic Signal	0.309 0.648	A B
20.	Gothard Street at Driveway No. 3 (HB)	AM PM	LOS C	One-Way Stop	11.3 s/v 11.9 s/v	B B
21.	Gothard Street at Edinger Avenue (HB)	AM PM	LOS C	8∅ Traffic Signal	0.505 0.638	A B
22.	Gothard Street at Heil Avenue (HB)	AM PM	LOS C	2∅ Traffic Signal	0.450 0.520	A A
23.	I-405 SB Ramps at Center Avenue (HB)	AM PM	LOS D	3∅ Traffic Signal	0.503 0.824	A D
24.	Beach Boulevard at McFadden Avenue (WM)	AM PM	LOS D	8∅ Traffic Signal	0.736 0.751	C C
25.	Beach Boulevard at Center Avenue (HB)	AM PM	LOS D	2∅ Traffic Signal	0.596 0.701	A C
26.	Beach Boulevard at Edinger Avenue (HB)	AM PM	LOS E	8∅ Traffic Signal	0.670 0.786	B C

Notes:

- **Bold ICU/LOS** or **HCM/LOS** values indicate adverse service levels based on City of Huntington Beach and City of Westminster LOS standards
- sec/veh = seconds per vehicle
- HB = City of Huntington Beach and WM = City of Westminster

4.0 TRAFFIC FORECASTING METHODOLOGY

In order to estimate the traffic impact characteristics of the proposed Project, a multi-step process has been utilized. The first step is traffic generation, which estimates the total arriving and departing traffic on a peak hour and daily basis. The traffic generation potential is forecast by applying the appropriate vehicle trip generation equations or rates to the project development tabulation.

The second step of the forecasting process is traffic distribution, which identifies the origins and destinations of inbound and outbound project traffic. These origins and destinations are typically based on demographics and existing/expected future travel patterns in the study area.

The third step is traffic assignment, which involves the allocation of project traffic to study area streets and intersections. Traffic assignment is typically based on minimization of travel time, which may or may not involve the shortest route, depending on prevailing operating conditions and travel speeds. Traffic distribution patterns are indicated by general percentage orientation, while traffic assignment allocates specific volume forecasts to individual roadway links and intersection turning movements throughout the study area.

With the forecasting process complete and project traffic assignments developed, the impact of the proposed project is isolated by comparing operational (LOS) conditions at selected key intersections using expected future traffic volumes with and without forecast project traffic. The need for site-specific and/or cumulative local area traffic improvements can then be evaluated and the significance of the project's impacts identified.

5.0 PROJECT TRAFFIC CHARACTERISTICS

5.1 Project Traffic Generation

Traffic generation is expressed in vehicle trip ends, defined as one-way vehicular movements, either entering or exiting the generating land use. Generation equations and/or rates used in the traffic forecasting procedure are typically found in the 9th Edition of *Trip Generation*, published by the Institute of Transportation Engineers (ITE) [Washington D.C., 2012]. ITE data is sometimes supplemented by project-specific field study and trip rate derivation, as has been done for this project's student growth component.

Table 5-1 summarizes the trip generation rates used in forecasting the vehicular trips generated by the two components of the proposed Project (i.e. student growth and Boys and Girls Club after school building/gymnasium facilities project). As shown, the trip generation potential of the student growth project component was estimated using the empirical rates developed from the existing driveway counts for an existing baseline enrollment of 12,746 students (refer to *Appendix A* and the footnotes within *Table 5-1* for specific details on the development of the trip rates). The trip generation potential of the Boys and Girls Club afterschool building is taken directly from the *Boys and Girls Club After School Building Focused Traffic Study,* prepared by LSA Associates, Inc. ***Appendix C*** contains a copy of the trip generation table for the after school building contained within the *Focused Traffic Study*, which was developed based on the proposed operations of the facility. The trip generation potential of the Boys and Girls Club gymnasium facilities was estimated using ITE Land Use 495: Recreational Community Center trip rates and based on the proposed operations of the youth leagues that would occur in the gymnasium.

Table 5-2 presents the proposed Project's forecast peak hour and daily traffic volumes. Review of the upper portion of *Table 5-2* shows that the student growth component of the proposed project (i.e. net increase of 2,645 students) is forecast to generate 3,018 daily trips, with 233 trips forecast during the AM peak hour and 285 trips forecast during the PM peak hour. Review of the middle portion of *Table 5-2* shows that the Boys and Girls Club afterschool building component of the proposed project is forecast to generate 258 daily trips, with 2 trips forecast during the AM peak hour and 190 trips forecast during the PM peak hour. Review of the lower portion of *Table 5-2* shows that the Boys and Girls Club gymnasium facilities component of the proposed project is forecast to generate 399 daily trips, with 20 trips forecast during the AM peak hour and 61 trips forecast during the PM peak hour.

Overall, as shown at the bottom of *Table 5-2,* the proposed Project is forecast to generate approximately 3,675 daily trips, with 255 trips (200 inbound, 55 outbound) produced in the AM peak hour and 536 trips (270 inbound, 266 outbound) produced in the PM peak hour on a typical weekday.

TABLE 5-1

PROJECT TRAFFIC GENERATION RATES[3]

Project Description	Daily 2-Way	AM Peak Hour			PM Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total
Student Growth							
▪ GWC Empirical Rate (TE/Student)[4]	1.141	0.070	0.018	0.088	0.050	0.058	0.108
Boys and Girls Club After School Building							
▪ Based on Proposed Operations[5]	---	---	---	---	---	---	---
Boys and Girls Club Gymnasium Facilities							
▪ 495: Recreational Community Center (TE/1000 SF)	33.82	1.35	0.70	2.05	1.34	1.40	2.74
▪ Youth Leagues (Based on Proposed Operations)[6]	---	---	---	---	---	---	---

3 Unless otherwise noted, Source: *Trip Generation*, 9th Edition, Institute of Transportation Engineers (ITE), Washington, D.C. (2012).

4 The trip generation rates for the student growth project component were developed based on existing daily, AM peak hour and PM peak hour traffic counts collected at the Golden West College driveways in October 2013. The traffic counts revealed that on a typical weekday, the Golden West College campus generates 14,541 daily trips, 1,123 AM peak hour trips (888 inbound, 235 outbound) and 1,375 PM peak hour trips (640 inbound, 735 outbound). The aforementioned trips where then divided by the existing number of students (i.e. 12,746 students) to determine the daily, AM peak hour and PM peak hour rates per student.

5 Source: *Boys and Girls Club After School Building Focused Traffic Study*, prepared by LSA Associates, Inc.

6 Based on the proposed operations of the youth leagues (i.e. 2 games per evening, 16 youths max per game and 1 referee per game). To provide a conservative forecast, it is assumed that all teams and referees arrive prior to 6:00 PM during the commuter PM peak period, resulting in 34 PM peak hour inbound trips [i.e. 32 inbound trips for the 32 youth participants (dropped off by their parents) and 2 inbound trips for the 2 referees].

TABLE 5-2

PROJECT TRAFFIC GENERATION FORECAST

Project Description	Daily 2-Way	AM Peak Hour			PM Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total
Student Growth							
▪ Net Increase 2,645 Students	3,018	185	48	233	132	153	285
Boys and Girls Club After School Building							
▪ 225 Students/17 Staff Members[7]	258	2	0	2	91	99	190
Boys and Girls Club Gymnasium Facilities							
▪ Gymnasium (9,794 SF)	331	13	7	20	13	14	27
▪ Youth Leagues – 2 Games Per Evening (16 Youths Max and 1 Referee per Game)[8]	68	0	0	0	34	0	34
Total Boys and Girls Club Gymnasium Facilities	***399***	***13***	***7***	***20***	***47***	***14***	***61***
Total Trip Generation Potential	**3,675**	**200**	**55**	**255**	**270**	**266**	**536**

7 Source: *Boys and Girls Club After School Building Focused Traffic Study*, prepared by LSA Associates, Inc.

8 Based on the proposed operations of the youth leagues (i.e. 2 games per evening, 16 youths max per game and 1 referee per game). To provide a conservative forecast, it is assumed that all teams and referees arrive prior to 6:00 PM during the commuter PM peak period, resulting in 34 PM peak hour inbound trips [i.e. 32 inbound trips for the 32 youth participants (dropped off by their parents) and 2 inbound trips for the 2 referees].

5.2 Project Traffic Distribution and Assignment

Figures 5-1 and ***5-2*** present the traffic distribution patterns for the student growth project component and the Boys and Girls Club after school building and gymnasium facilities project component, respectively. Project traffic volumes both entering and exiting the project site have been distributed and assigned to the adjacent street system based on the following considerations:

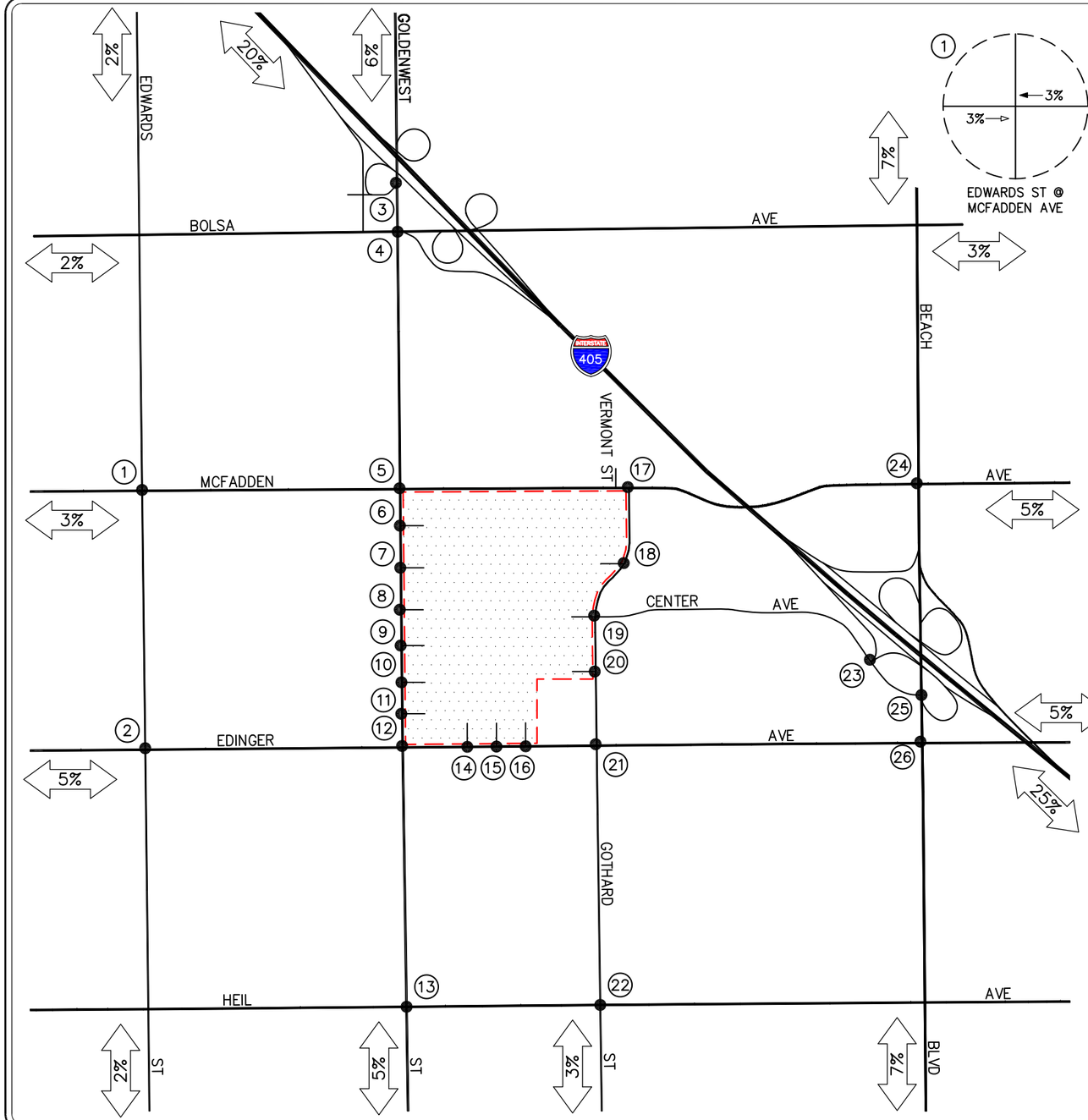
- the site's proximity to major traffic carriers (i.e. Goldenwest Street, Gothard Street, Edinger Avenue, McFadden Avenue, I-405 Freeway, etc.),
- expected localized traffic flow patterns based on adjacent street channelization and presence of traffic signals,
- review of existing peak hour traffic volumes and
- ingress/egress availability at the project site.

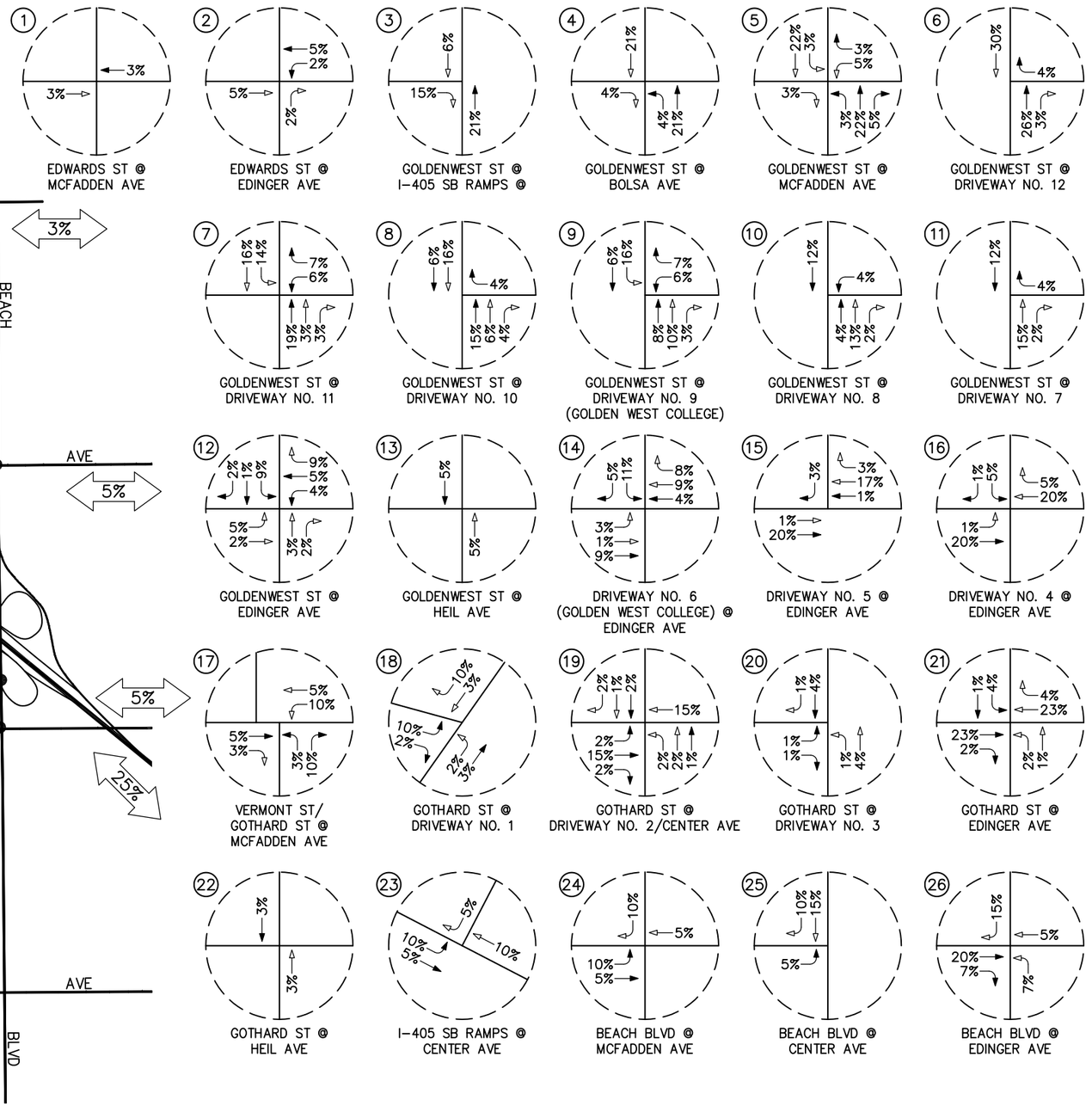
The anticipated AM and PM peak hour project traffic volumes associated with the Project are presented in ***Figures 5-3*** and ***5-4***, respectively. The traffic volume assignments presented in *Figures 5-3* and *5-4* reflect the traffic distribution characteristics shown in *Figures 5-1* and *5-2* and the traffic generation forecast presented in *Table 5-2.*

5.3 Existing Plus Project Traffic Conditions

The existing plus project traffic conditions have been generated based upon existing conditions and the estimated project traffic. These forecast traffic conditions have been prepared pursuant to the California Environmental Quality Act (CEQA) guidelines, which require that the potential impacts of a Project be evaluated upon the circulation system as it currently exists. This traffic volume scenario and the related intersection capacity analyses will identify the roadway improvements necessary to mitigate the direct traffic impacts of the Project, if any.

Figures 5-5 and ***5-6*** present projected AM and PM peak hour traffic volumes at the twenty six (26) key study intersections with the addition of the trips generated by the proposed Project to existing traffic volumes, respectively.





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LINSCOTT LAW & GREENSPAN engineers

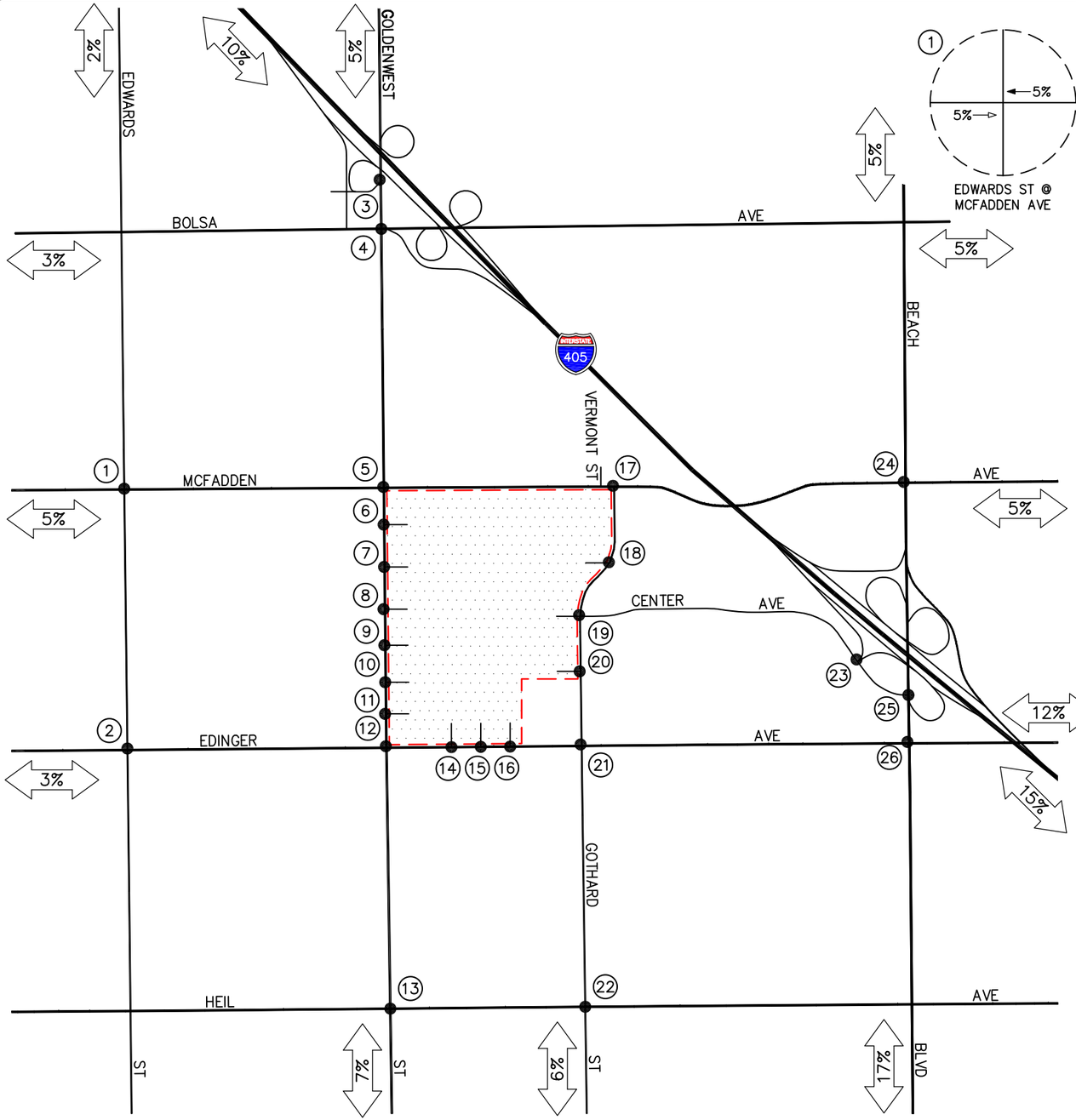
N NO SCALE

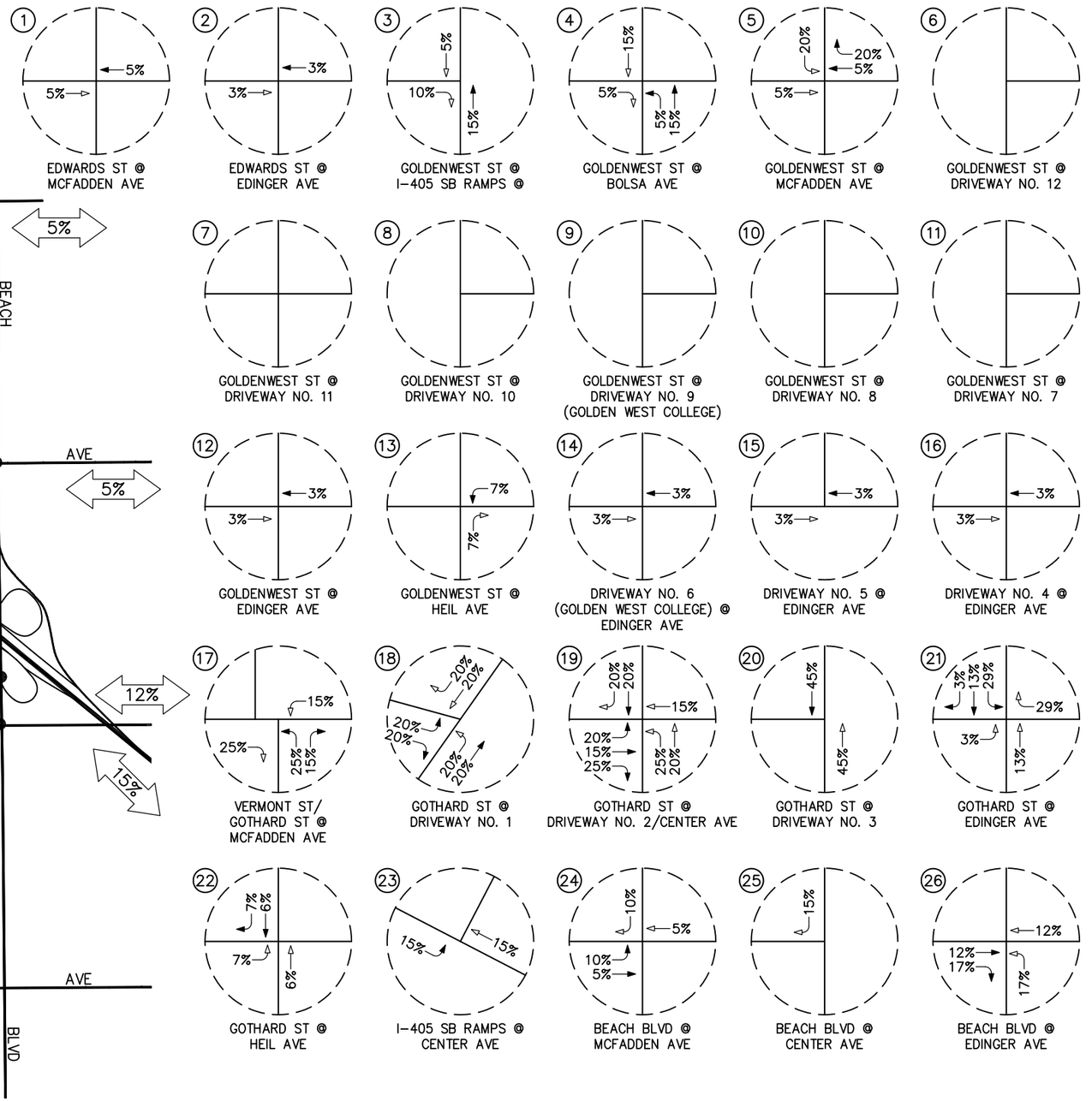
KEY

(#) = STUDY INTERSECTION
⇦ = INBOUND PERCENTAGE
⇦ = OUTBOUND PERCENTAGE
▭ = PROJECT SITE

FIGURE 5-1

PROJECT TRAFFIC DISTRIBUTION PATTERN – STUDENT GROWTH
GOLDEN WEST COLLEGE VISION 2020 FACILITIES MASTER PLAN, HUNTINGTON BEACH





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LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

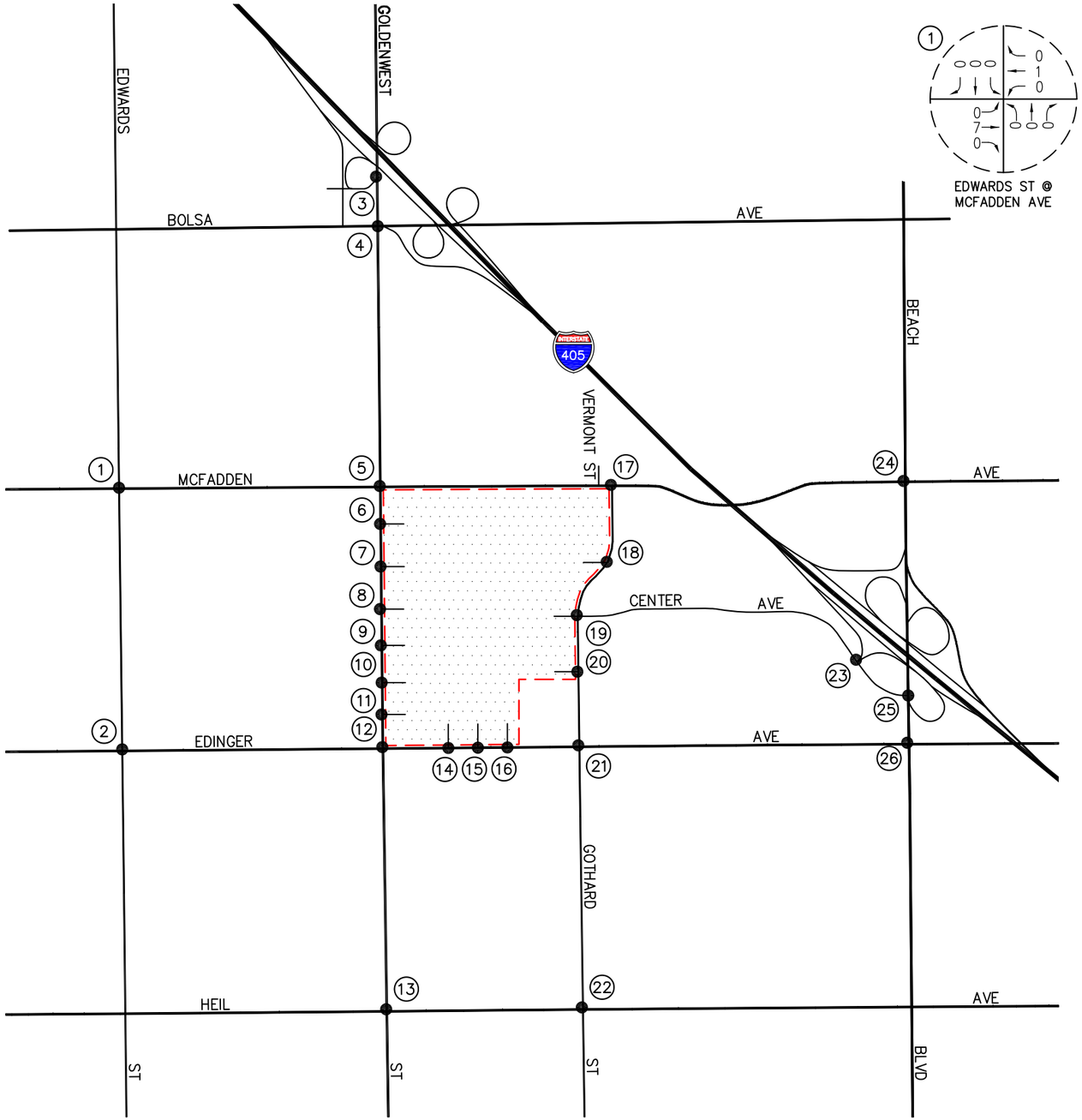
KEY

(#) = STUDY INTERSECTION
⇦ = INBOUND PERCENTAGE
⇦ = OUTBOUND PERCENTAGE
▭ = PROJECT SITE

FIGURE 5-2

PROJECT TRAFFIC DISTRIBUTION PATTERN – BOYS AND GIRLS CLUB GYMNASIUM AND AFTER SCHOOL BUILDING

GOLDEN WEST COLLEGE VISION 2020 FACILITIES MASTER PLAN, HUNTINGTON BEACH



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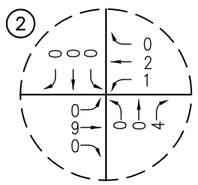
MCFADDEN AVE



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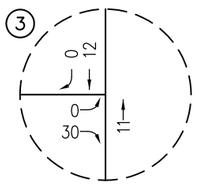

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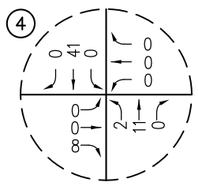
I-405 SB RAMPS @



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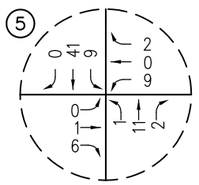
BOLSA AVE



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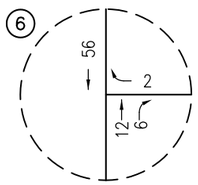

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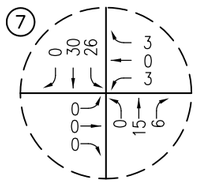

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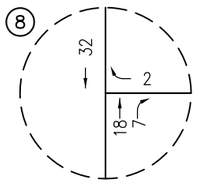

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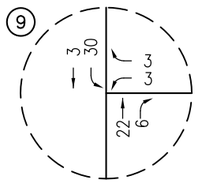

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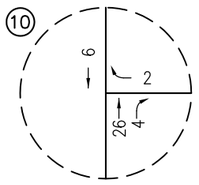
(GOLDEN WEST COLLEGE)



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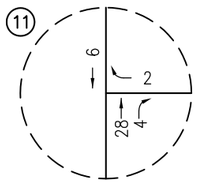

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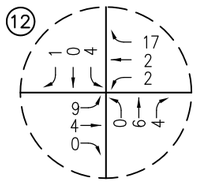
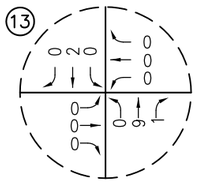


GOLDENWEST ST @
EDINGER AVE



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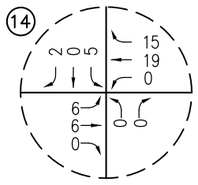
HEIL AVE



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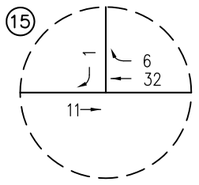
EDINGER AVE



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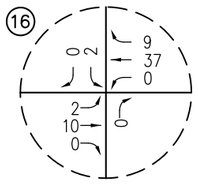
EDINGER AVE



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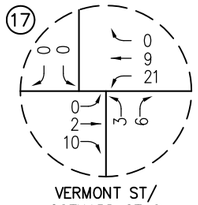
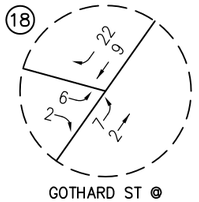


VERMONT ST/
GOTHARD ST @
MCFADDEN AVE



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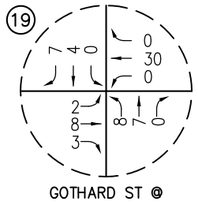

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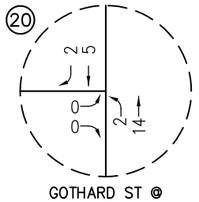

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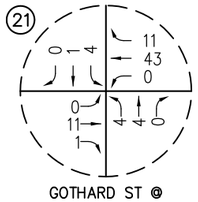

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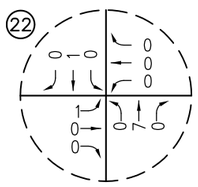

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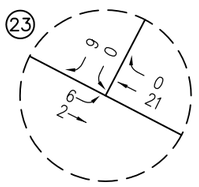
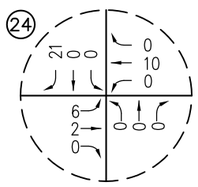
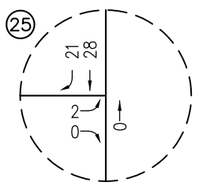


I-405 SB RAMPS @
CENTER AVE



BEACH BLVD @
MCFADDEN AVE



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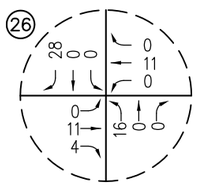

BEACH BLVD @
EDINGER AVE

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LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

KEY

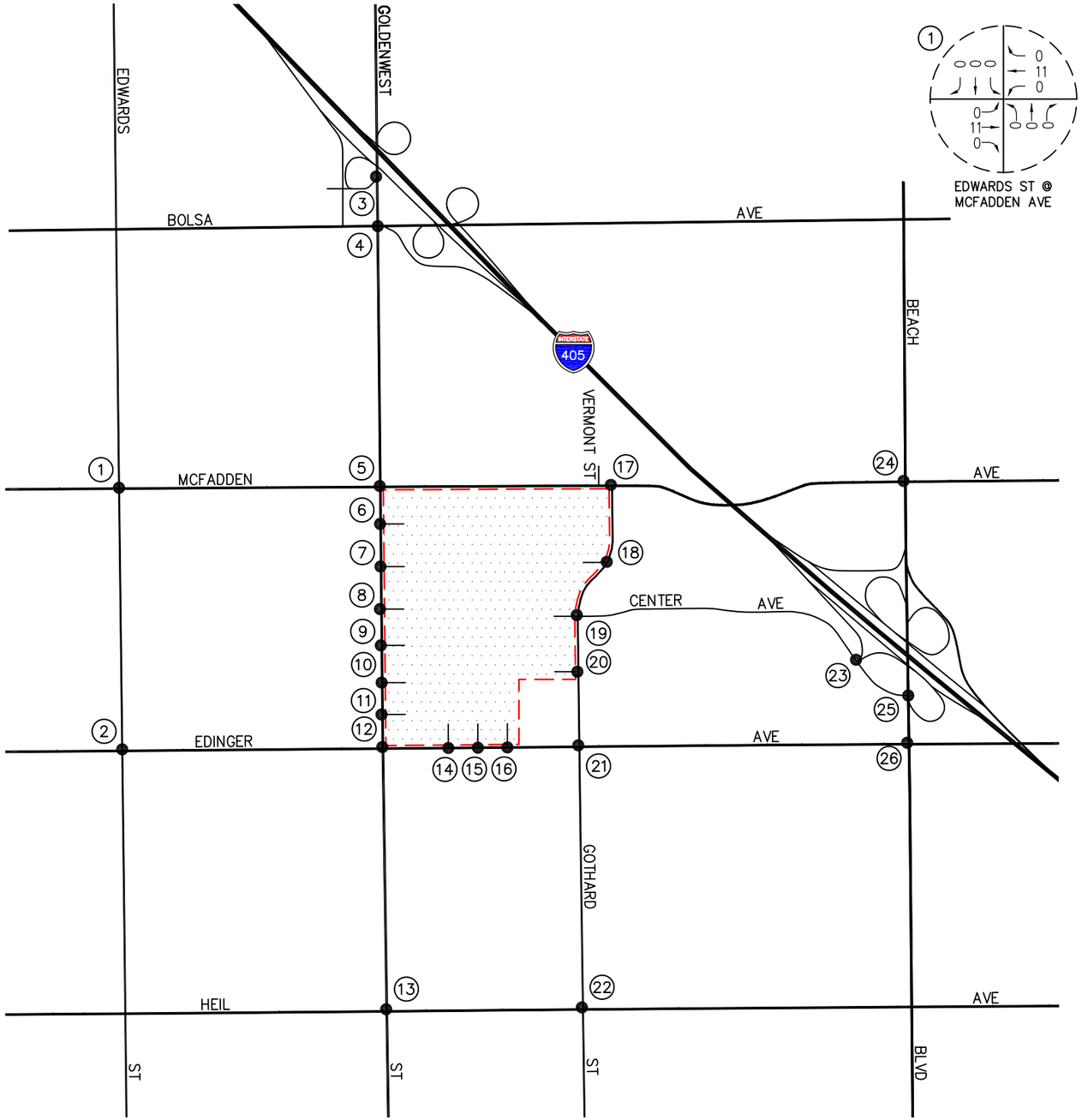
(#) = STUDY INTERSECTION

= PROJECT SITE

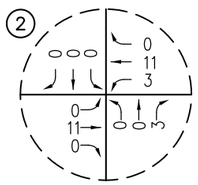
FIGURE 5-3

AM PEAK HOUR PROJECT TRAFFIC VOLUMES

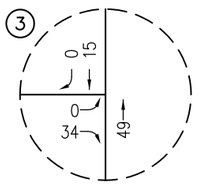
GOLDEN WEST COLLEGE VISION 2020 FACILITIES MASTER PLAN, HUNTINGTON BEACH



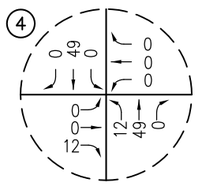
1 EDWARDS ST @ MCFADDEN AVE



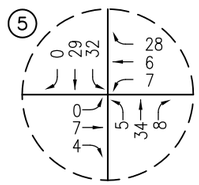
2 EDWARDS ST @ EDINGER AVE



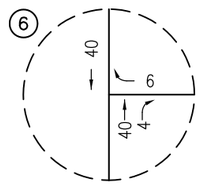
3 GOLDENWEST ST @ I-405 SB RAMPS @



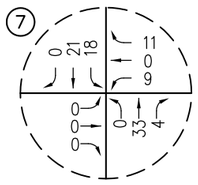
4 GOLDENWEST ST @ BOLSA AVE



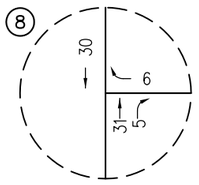
5 GOLDENWEST ST @ MCFADDEN AVE



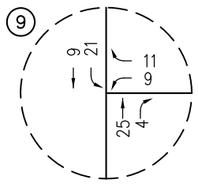
6 GOLDENWEST ST @ DRIVEWAY NO. 12



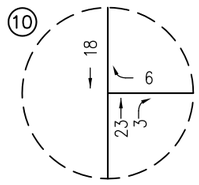
7 GOLDENWEST ST @ DRIVEWAY NO. 11



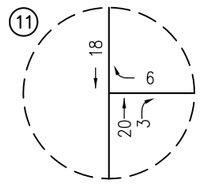
8 GOLDENWEST ST @ DRIVEWAY NO. 10



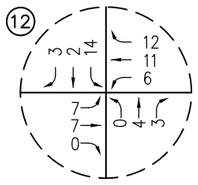
9 GOLDENWEST ST @ DRIVEWAY NO. 9 (GOLDEN WEST COLLEGE)



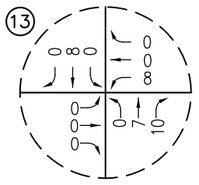
10 GOLDENWEST ST @ DRIVEWAY NO. 8



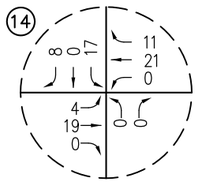
11 GOLDENWEST ST @ DRIVEWAY NO. 7



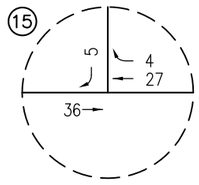
12 GOLDENWEST ST @ EDINGER AVE



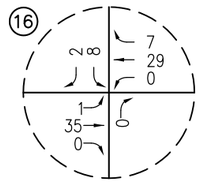
13 GOLDENWEST ST @ HEIL AVE



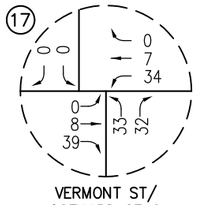
14 DRIVEWAY NO. 6 (GOLDEN WEST COLLEGE) @ EDINGER AVE



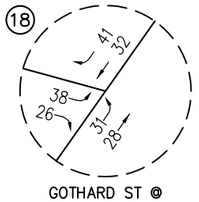
15 DRIVEWAY NO. 5 @ EDINGER AVE



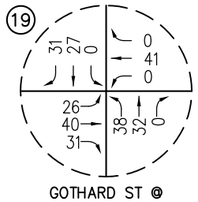
16 DRIVEWAY NO. 4 @ EDINGER AVE



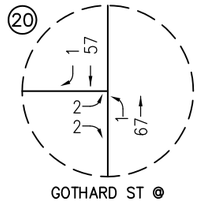
17 VERMONT ST/ GOTHARD ST @ MCFADDEN AVE



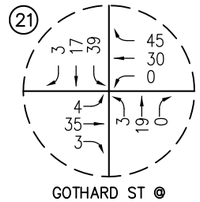
18 GOTHARD ST @ DRIVEWAY NO. 1



19 GOTHARD ST @ DRIVEWAY NO. 2/CENTER AVE



20 GOTHARD ST @ DRIVEWAY NO. 3



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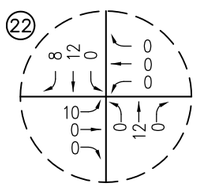
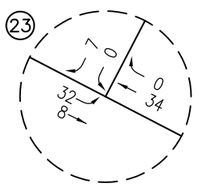
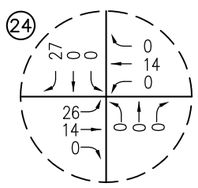


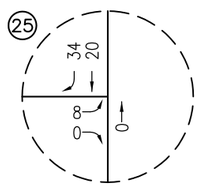
22 GOTHARD ST @ HEIL AVE



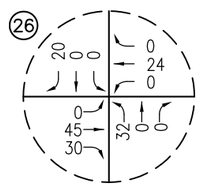
23 I-405 SB RAMPS @ CENTER AVE



24 BEACH BLVD @ MCFADDEN AVE



25 BEACH BLVD @ CENTER AVE



26 BEACH BLVD @ EDINGER AVE

n:\3300\21333396 - coast community college district, orange county\3396-2 golden west college\dwg\3396-2 f5-4.dwg LDP 14:30:25 12-11-2014 aguilar

LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

KEY

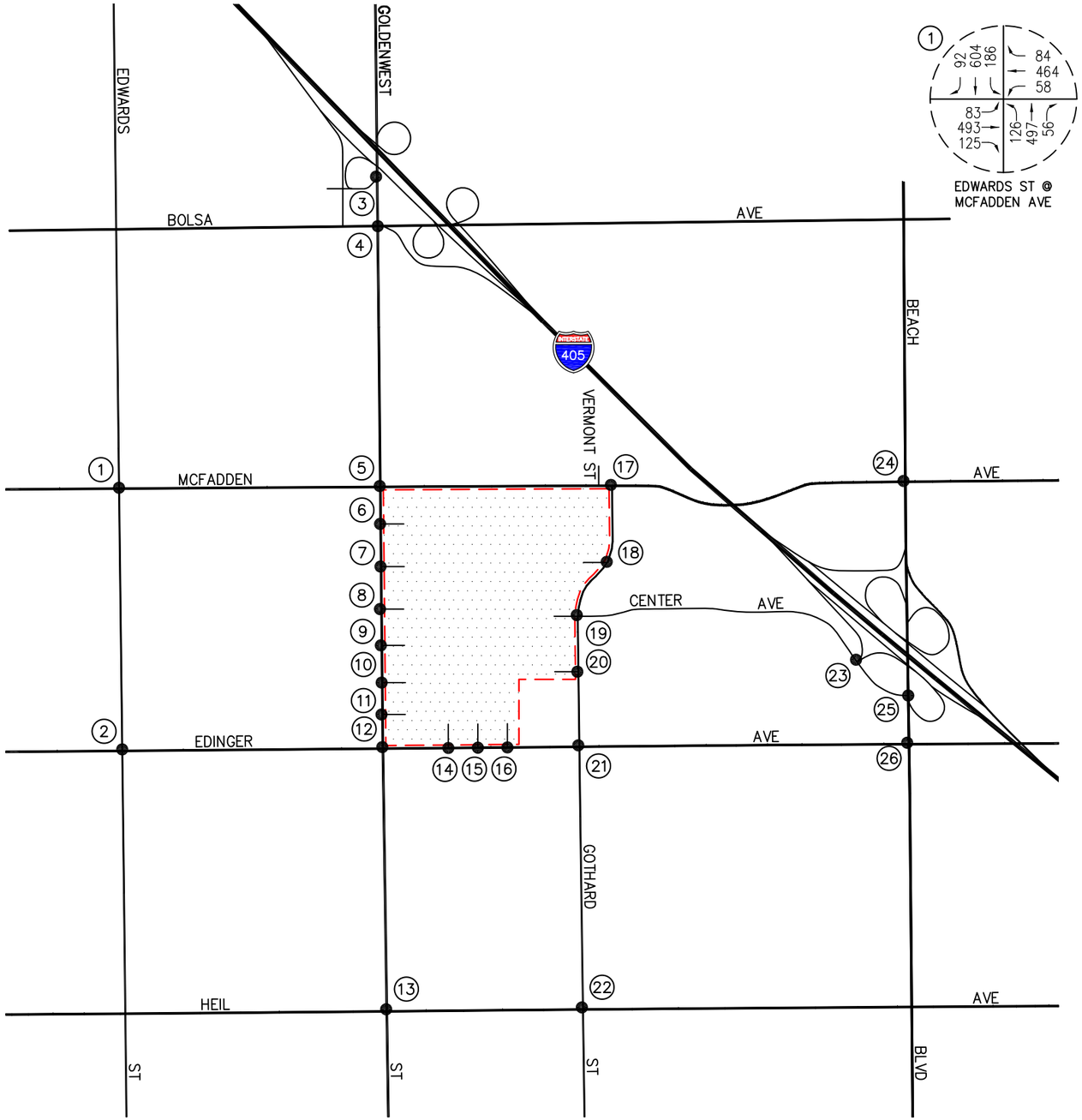
(#) = STUDY INTERSECTION

= PROJECT SITE

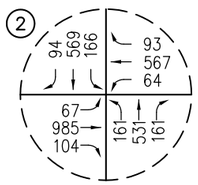
FIGURE 5-4

PM PEAK HOUR PROJECT TRAFFIC VOLUMES

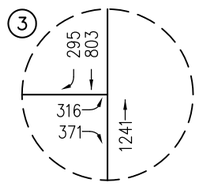
GOLDEN WEST COLLEGE VISION 2020 FACILITIES MASTER PLAN, HUNTINGTON BEACH



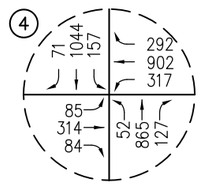
EDWARDS ST @
MCFADDEN AVE



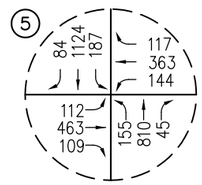
EDWARDS ST @
EDINGER AVE



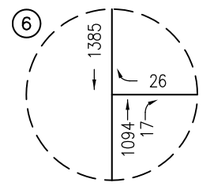
GOLDENWEST ST @
I-405 SB RAMPS @



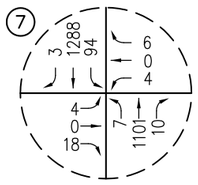
GOLDENWEST ST @
BOLSA AVE



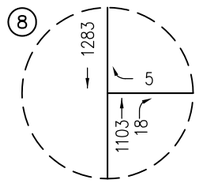
GOLDENWEST ST @
MCFADDEN AVE



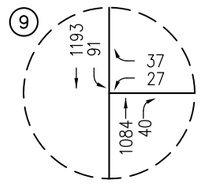
GOLDENWEST ST @
DRIVEWAY NO. 12



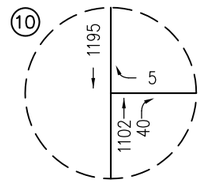
GOLDENWEST ST @
DRIVEWAY NO. 11



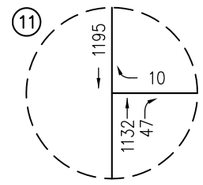
GOLDENWEST ST @
DRIVEWAY NO. 10



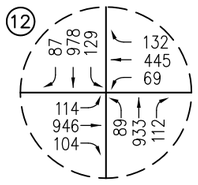
GOLDENWEST ST @
DRIVEWAY NO. 9
(GOLDEN WEST COLLEGE)



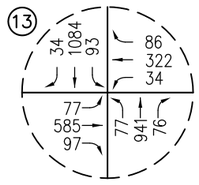
GOLDENWEST ST @
DRIVEWAY NO. 8



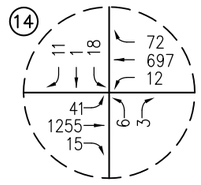
GOLDENWEST ST @
DRIVEWAY NO. 7



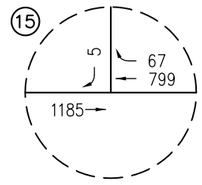
GOLDENWEST ST @
EDINGER AVE



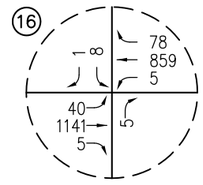
GOLDENWEST ST @
HEIL AVE



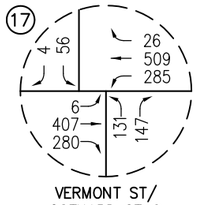
DRIVEWAY NO. 6
(GOLDEN WEST COLLEGE) @
EDINGER AVE



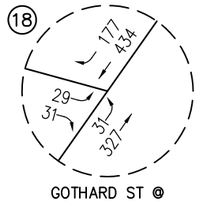
DRIVEWAY NO. 5 @
EDINGER AVE



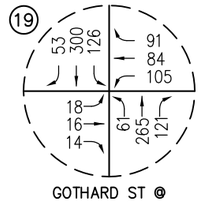
DRIVEWAY NO. 4 @
EDINGER AVE



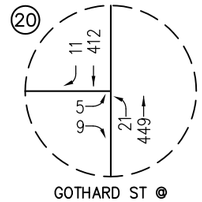
VERMONT ST/
GOTHARD ST @
MCFADDEN AVE



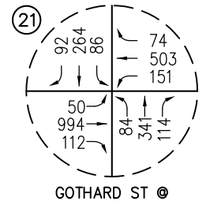
GOTHARD ST @
DRIVEWAY NO. 1



GOTHARD ST @
DRIVEWAY NO. 2/CENTER AVE



GOTHARD ST @
DRIVEWAY NO. 3



GOTHARD ST @
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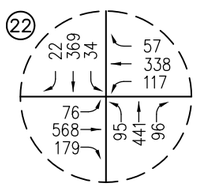
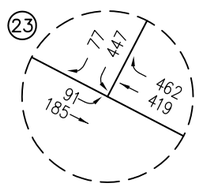
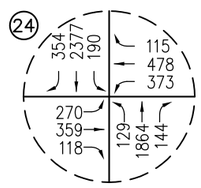


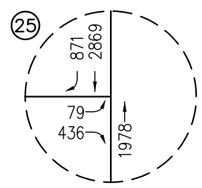
GOTHARD ST @
HEIL AVE



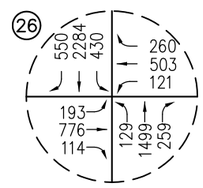
I-405 SB RAMPS @
CENTER AVE



BEACH BLVD @
MCFADDEN AVE



BEACH BLVD @
CENTER AVE



BEACH BLVD @
EDINGER AVE

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LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

KEY

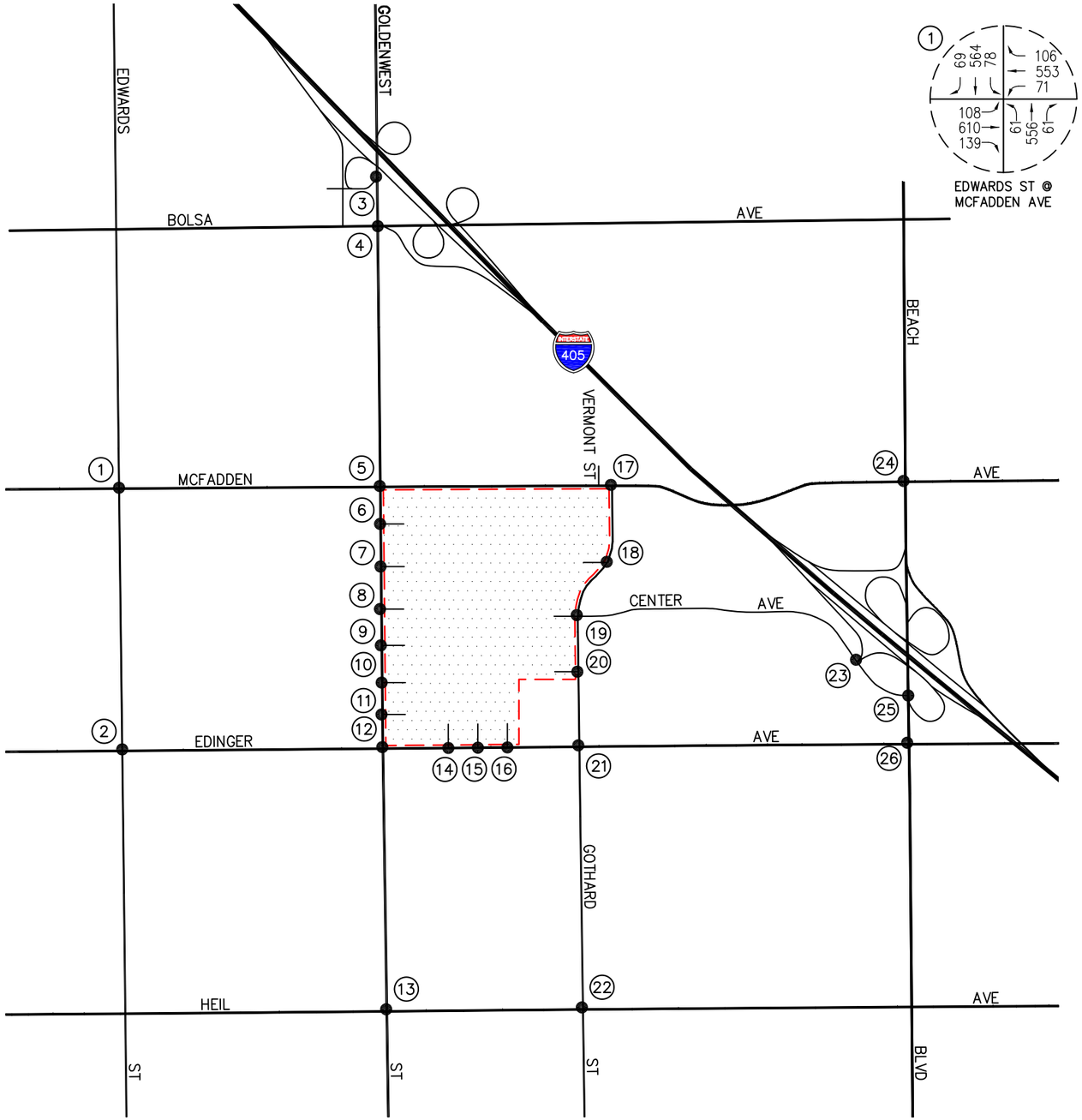
(#) = STUDY INTERSECTION

= PROJECT SITE

FIGURE 5-5

EXISTING PLUS PROJECT AM PEAK HOUR TRAFFIC VOLUMES

GOLDEN WEST COLLEGE VISION 2020 FACILITIES MASTER PLAN, HUNTINGTON BEACH



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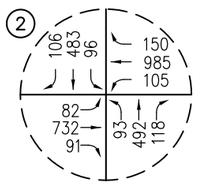

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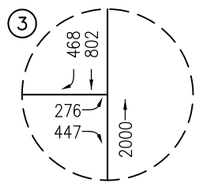

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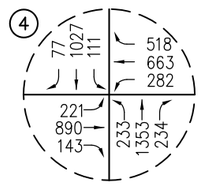

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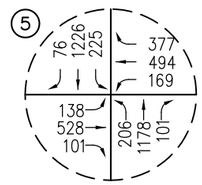

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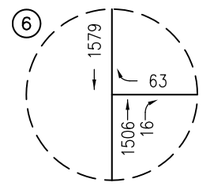

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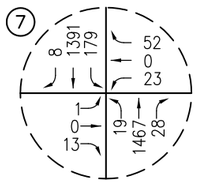

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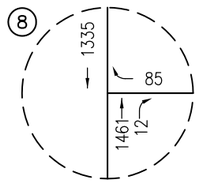

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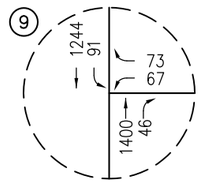

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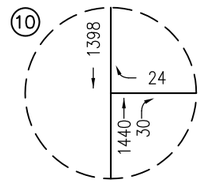

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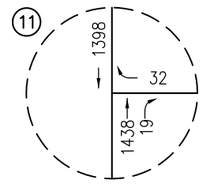

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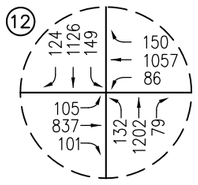

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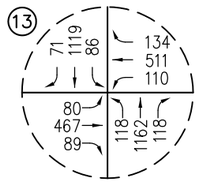

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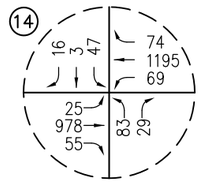

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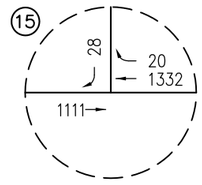

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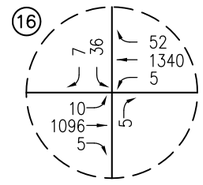

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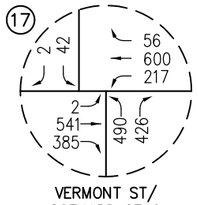

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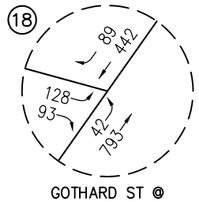

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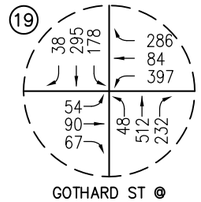

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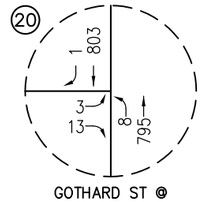

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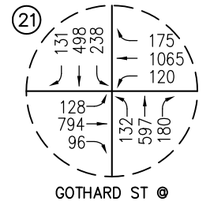

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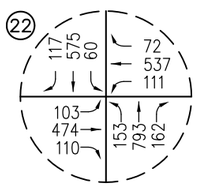

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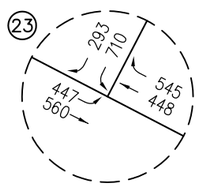

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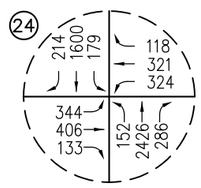

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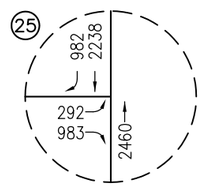

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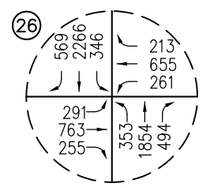

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LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

KEY
(#) = STUDY INTERSECTION
= PROJECT SITE

FIGURE 5-6

EXISTING PLUS PROJECT PM PEAK HOUR TRAFFIC VOLUMES
GOLDEN WEST COLLEGE VISION 2020 FACILITIES MASTER PLAN, HUNTINGTON BEACH

6.0 FUTURE TRAFFIC CONDITIONS

6.1 Ambient Traffic Growth

Horizon year, background traffic growth estimates have been calculated using an ambient traffic growth factor. The ambient traffic growth factor is intended to include unknown and future cumulative projects in the study area, as well as account for regular growth in traffic volumes due to the development of projects outside the study area. The future growth in traffic volumes has been calculated at two percent (2.0%) per year. Applied to the Year 2013 existing traffic volumes, this factor results in a twenty two percent (22.0%) growth in existing volumes to horizon year 2024.

6.2 Cumulative Projects Traffic Characteristics

In order to make a realistic estimate of future on-street conditions prior to implementation of the proposed Project, the status of other known development projects (cumulative projects) has been researched at the City of Huntington Beach and the City of Westminster. With this information, the potential impact of the proposed Project can be evaluated within the context of the cumulative impact of all ongoing development. Based on our research, there are seven (7) cumulative projects in the City of Huntington Beach and eight (8) cumulative projects in the City of Westminster that have either been built, but not yet fully occupied, or are being processed for approval. These fifteen (15) cumulative projects have been included as part of the cumulative background setting.

Table 6-1 provides the location and a brief description for each of the fifteen (15) cumulative projects. ***Figure 6-1*** graphically illustrates the location of the cumulative projects. These cumulative projects are expected to generate vehicular traffic, which may affect the operating conditions of the key study intersections.

Table 6-2 presents the resultant trip generation for the fifteen (15) cumulative projects. As shown in *Table 6-2*, the fifteen (15) cumulative projects are forecast to generate a combined total of 22,794 daily trips, with 1,327 trips (416 inbound and 911 outbound) forecast during the AM peak hour and 1,904 trips (1,124 inbound and 780 outbound) forecast during the PM peak hour.

The AM and PM peak hour traffic volumes associated with the fifteen (15) cumulative projects in the Year 2024 are presented in ***Figures 6-2*** and ***6-3***, respectively.

6.3 Year 2024 Cumulative Traffic Volumes

Figures 6-4 and ***6-5*** present the Year 2024 AM and PM peak hour cumulative traffic volumes at the twenty six (26) key study intersections, respectively. Please note that the cumulative traffic volumes represent the accumulation of existing traffic, ambient growth traffic and cumulative projects traffic.

Figures 6-6 and ***6-7*** illustrate the Year 2024 forecast AM and PM peak hour traffic volumes with the inclusion of the trips generated by the proposed Project, respectively.

TABLE 6-1

LOCATION AND DESCRIPTION OF CUMULATIVE PROJECTS[9]

No.	Cumulative Project	Location/Address	Description
City of Huntington Beach Development			
1.	Edinger Walmart	6912 Edinger Avenue	100,865 SF Walmart
2.	Huntington Beach Lofts	7302 Center Avenue	385 luxury residential units and 10,000 SF retail
3.	The Boardwalk	Edinger Ave & Gothard	487 DU, 14,000 SF commercial and 0.5 acre public park
4.	Pedigo Apartments	7262 Edinger Avenue	510 apartments
5.	Parkside Estates	Graham St & Warner Ave	111 single family homes and 1.6 acre neighborhood park
6.	Skate Park Project	7461 Center Avenue	45,000 SF skate park
7.	The Village at Bella Terra	7777 Edinger Ave	467 multi-family dwelling units, 17,500 SF mixed-use retail/rest. and 12,000 SF retail/rest.[10]
City of Westminster Development			
8.	Chuze Gym	1025 Westminster Mall Road	17,781 SF gym
9.	Fitness Facility (2014-30)	15320 Goldenwest St	3,000 SF fitness facility
10.	Popeye's Restaurant	14542 Beach Blvd	2,509 SF fast-food restaurant
11.	Dunkin' Donuts	15482 Goldenwest St	2,251 SF drive-thru Dunkin' Donuts
12.	Live-Work Units (2014-84)	6302 Maple St	37 live-work units
13.	Condominiums (2014-69)	14260 Willow Lane	79 detached condos
14.	Retail (2014-70)	14361 Beach Blvd	23,262 SF retail
15.	Adult School (2014-72)	1025 Westminster Mall Road	7,823 SF adult school

Notes:

- SF = Square-feet
- DU = Dwelling Units

9 Source: City of Huntington Beach and City of Westminster Planning Department staff.

10 Based on information provided by the apartment operator, at the time of the traffic counts (i.e. October 2013), 326 dwelling units out of the 467 dwelling units were occupied. Therefore, only 141 dwelling units and 29,500 SF of mixed-use retail/restaurant were considered as a cumulative project.

TABLE 6-2

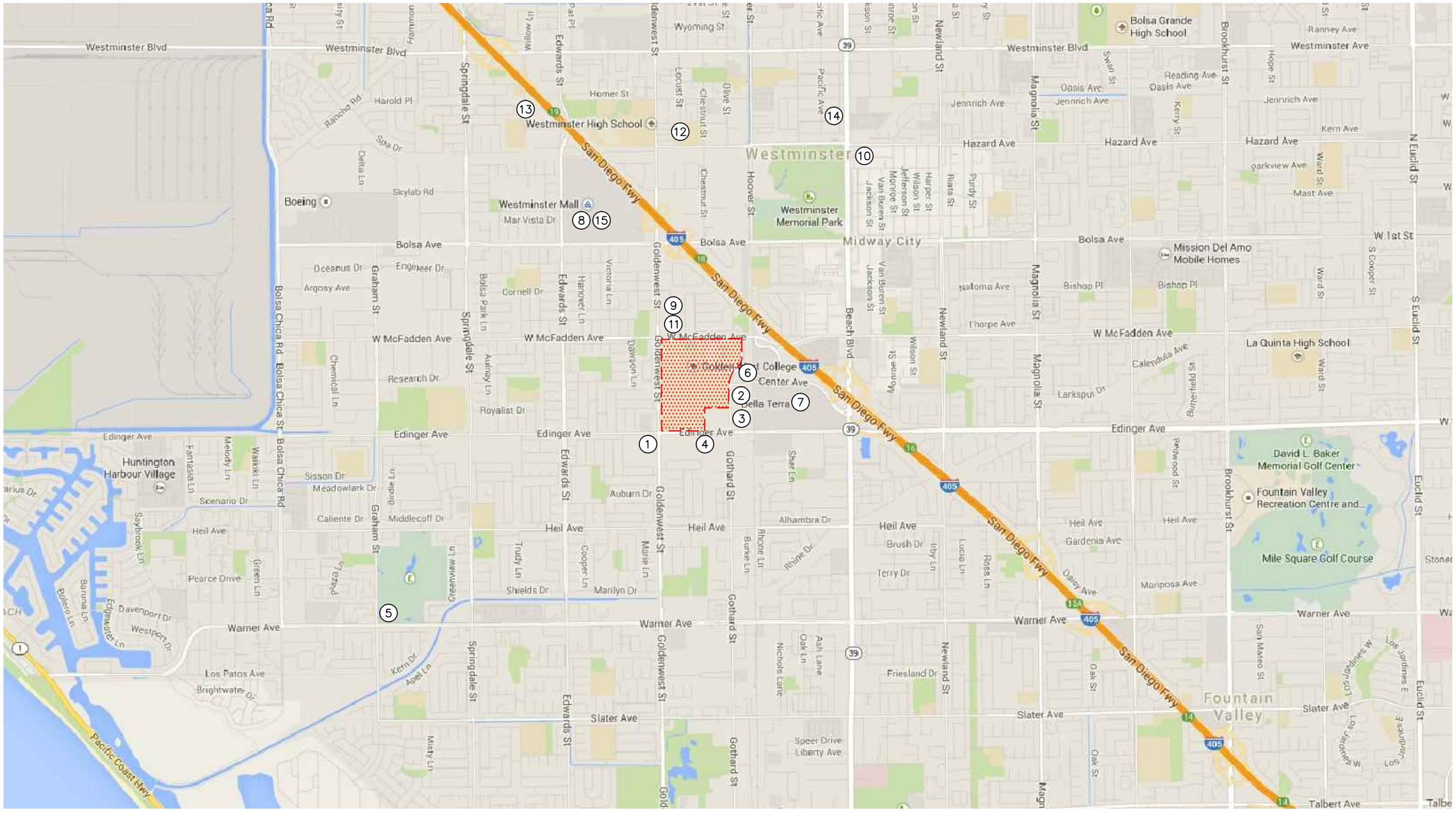
CUMULATIVE PROJECTS TRAFFIC GENERATION FORECAST[11]

Cumulative Project Description	Daily 2-Way	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
1. Edinger Walmart[12]	5,359	95	73	168	228	237	465
2. Huntington Beach Lofts	1,509	-11	132	121	106	16	122
3. The Boardwalk	3,796	58	202	260	213	125	338
4. Pedigo Apartments	3,392	52	208	260	205	111	316
5. Parkside Estates	1,057	21	62	83	70	41	111
6. Skate Park Project[13]	416	7	6	13	29	33	62
7. The Village at Bella Terra	2,396	34	70	104	103	79	182
8. Chuze Gym	630	13	12	25	36	27	63
9. Fitness Facility (2014-30)	110	2	2	4	6	5	11
10. Popeye's Restaurant	964	49	33	82	25	24	49
11. Dunkin' Donuts	1,382	57	56	113	24	24	48
12. Live-Work Units (2014-84)	215	3	13	16	13	6	19
13. Condominiums (2014-69)	459	6	29	35	27	14	41
14. Retail (2014-70)	894	13	7	20	27	30	57
15. Adult School (2014-72)	215	17	6	23	12	8	20
Cumulative Projects Trip Generation Potential	**22,794**	**416**	**911**	**1,327**	**1,124**	**780**	**1,904**

[11] Unless otherwise noted, Source: *Trip Generation*, 9th Edition, Institute of Transportation Engineers (ITE), Washington, D.C. (2012).

[12] Source: *Walmart Traffic Impact Analysis*, prepared by Urban Crossroads.

[13] Source: *Traffic Impact Analysis Report for Center Avenue Skate Park*, prepared by Austin-Foust Associates.



LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

SOURCE: GOOGLE

KEY

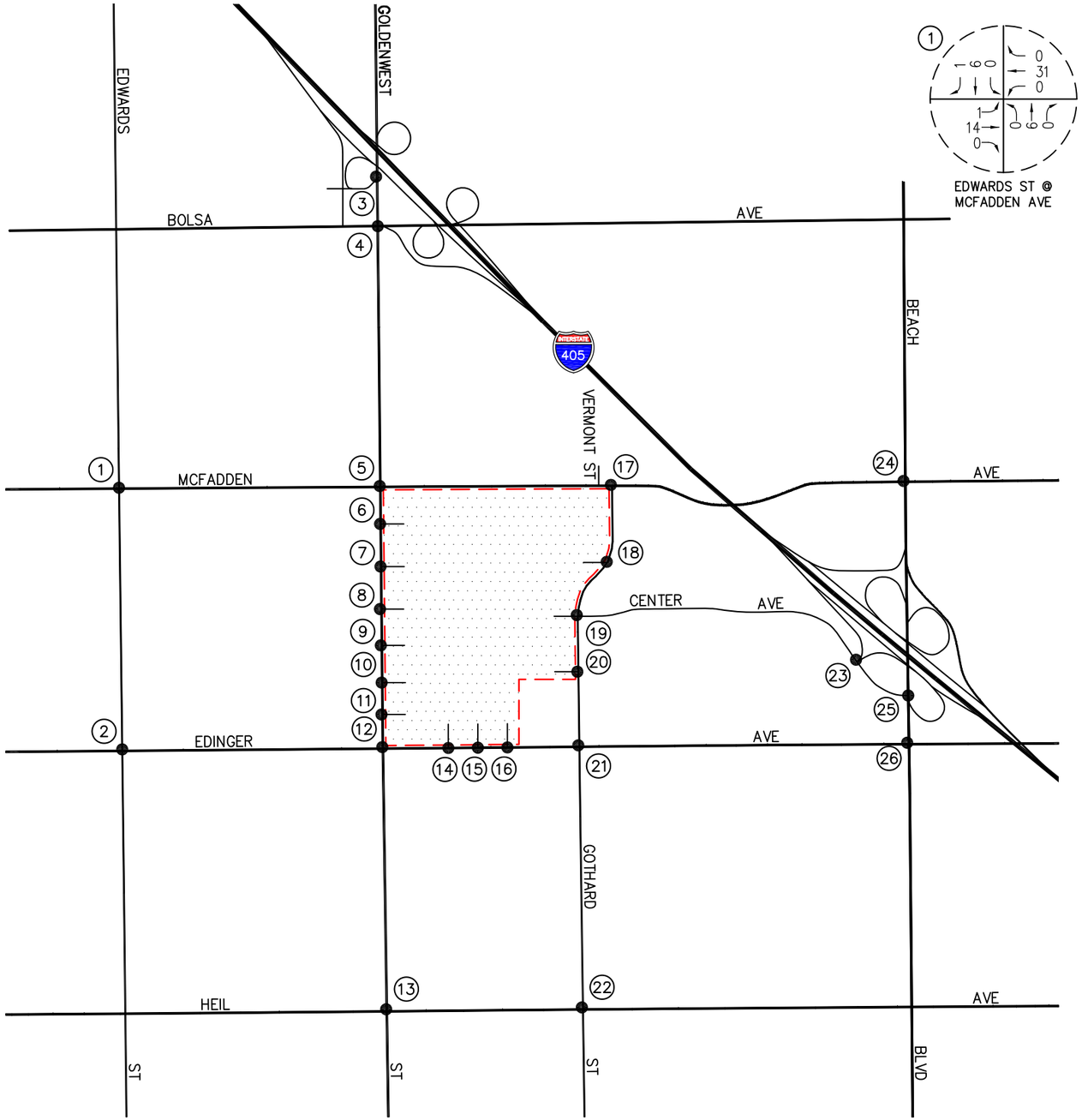
(#) = LOCATION OF CUMULATIVE PROJECT

= PROJECT SITE

FIGURE 6–1

LOCATION OF CUMULATIVE PROJECTS

GOLDEN WEST COLLEGE VISION 2020 FACILITIES MASTER PLAN, HUNTINGTON BEACH



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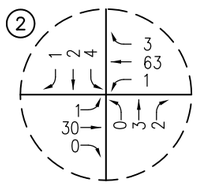

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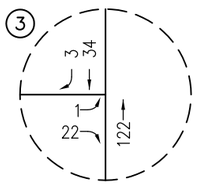

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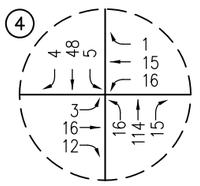
I-405 SB RAMPS @



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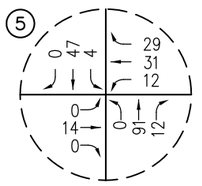

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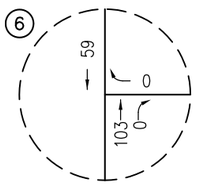

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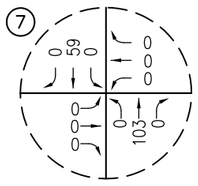

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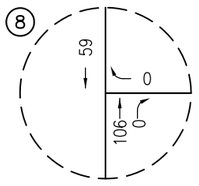

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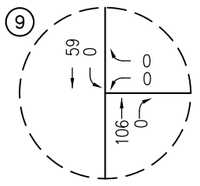

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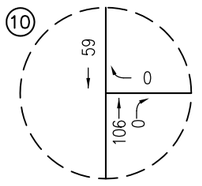

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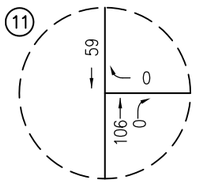

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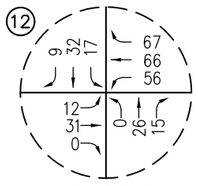

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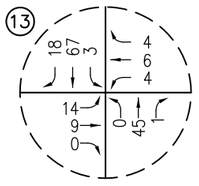
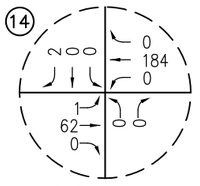
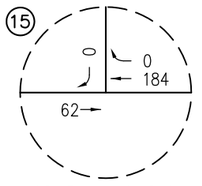
EDINGER AVE



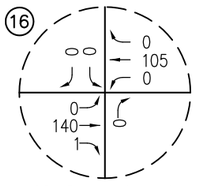
GOLDENWEST ST @
HEIL AVE



DRIVEWAY NO. 6
(GOLDEN WEST COLLEGE) @
EDINGER AVE



DRIVEWAY NO. 5 @
EDINGER AVE



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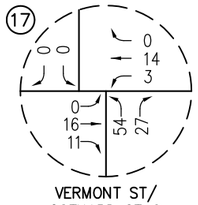
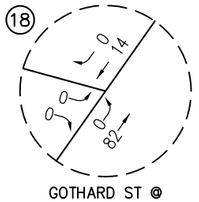
EDINGER AVE



VERMONT ST/
GOTHARD ST @
MCFADDEN AVE



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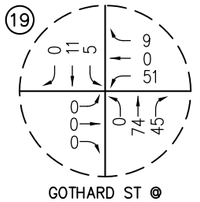
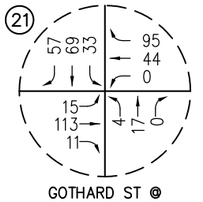
DRIVEWAY NO. 1



GOTHARD ST @
DRIVEWAY NO. 2/CENTER AVE



GOTHARD ST @
DRIVEWAY NO. 3



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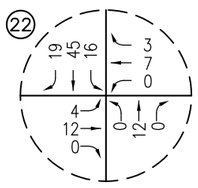
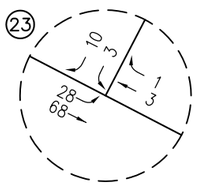
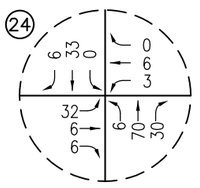
EDINGER AVE



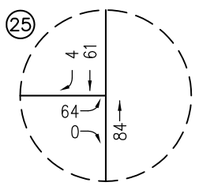
GOTHARD ST @
HEIL AVE



I-405 SB RAMPS @
CENTER AVE



BEACH BLVD @
MCFADDEN AVE



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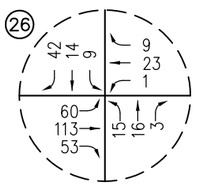
CENTER AVE



BEACH BLVD @
EDINGER AVE

n:\3300\21333396 - coast community college district, orange county\3396-2 golden west college\dwg\3396-2 f6-2.dwg LDP 14:32:3 12-11-2014 aguilar

LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

KEY

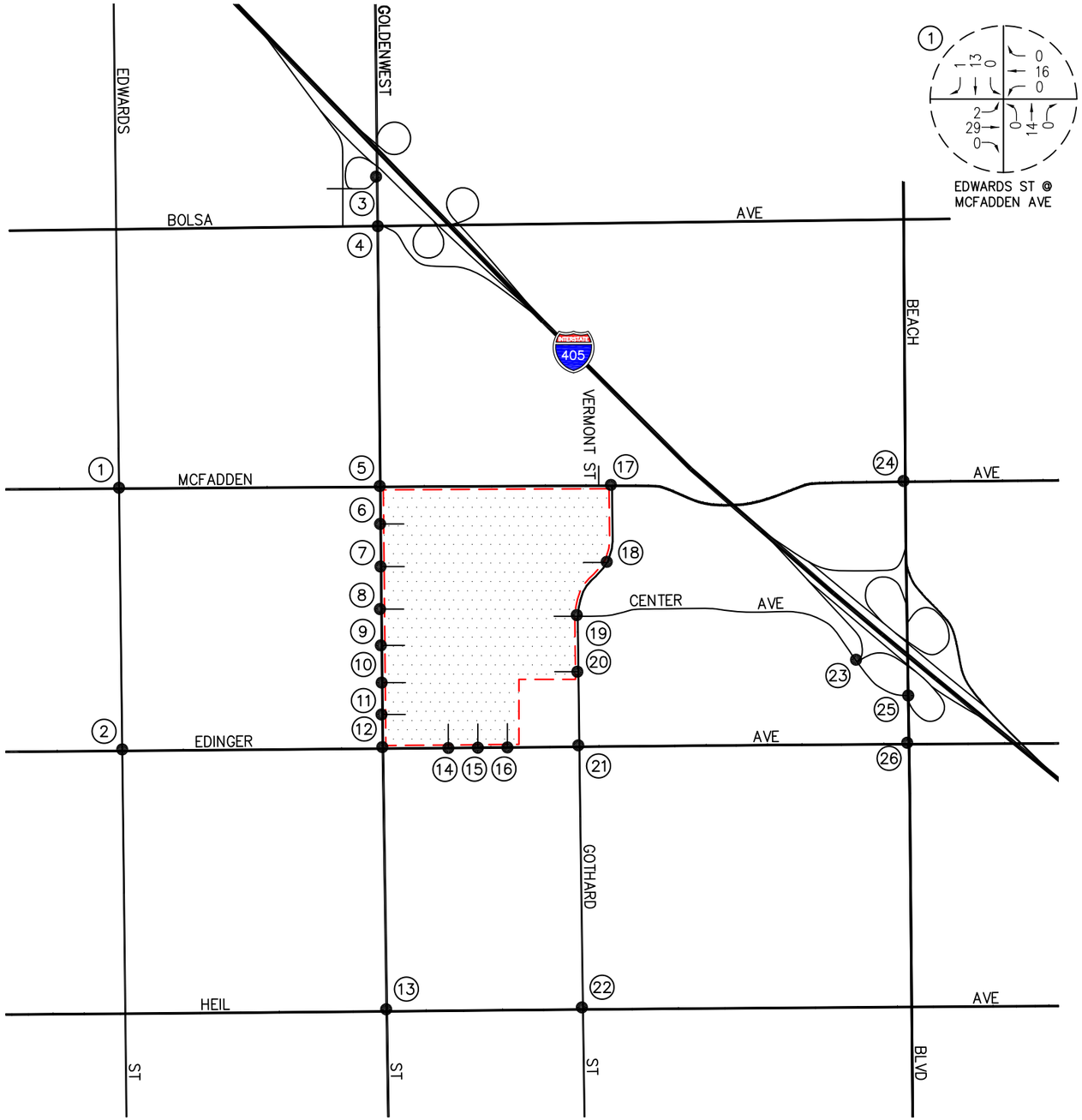
(#) = STUDY INTERSECTION

= PROJECT SITE

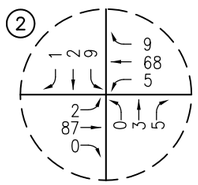
FIGURE 6-2

AM PEAK HOUR CUMULATIVE PROJECT TRAFFIC VOLUMES

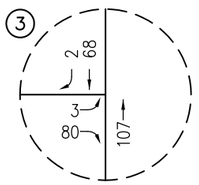
GOLDEN WEST COLLEGE VISION 2020 FACILITIES MASTER PLAN, HUNTINGTON BEACH



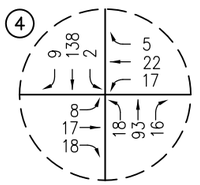
EDWARDS ST @
MCFADDEN AVE



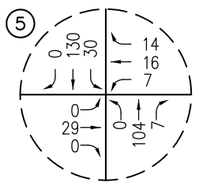
EDWARDS ST @
EDINGER AVE



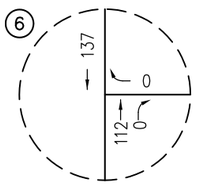
GOLDENWEST ST @
I-405 SB RAMPS @



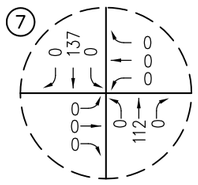
GOLDENWEST ST @
BOLSA AVE



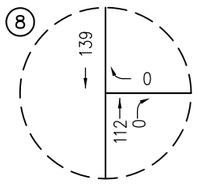
GOLDENWEST ST @
MCFADDEN AVE



GOLDENWEST ST @
DRIVEWAY NO. 12



GOLDENWEST ST @
DRIVEWAY NO. 11



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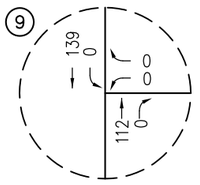
DRIVEWAY NO. 10



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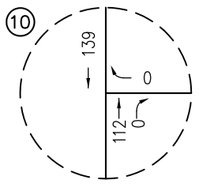
(GOLDEN WEST COLLEGE)



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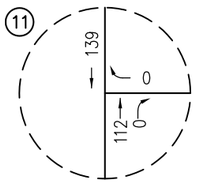
DRIVEWAY NO. 8



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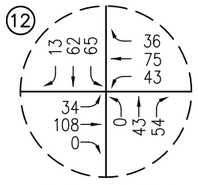
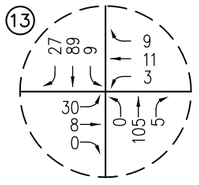
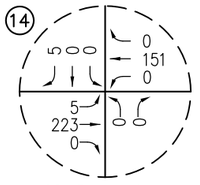


GOLDENWEST ST @
EDINGER AVE



GOLDENWEST ST @
HEIL AVE



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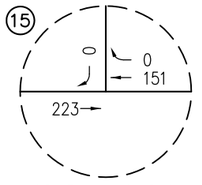
(GOLDEN WEST COLLEGE) @
EDINGER AVE



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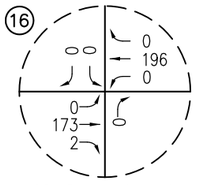
EDINGER AVE



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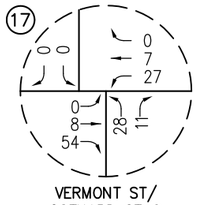
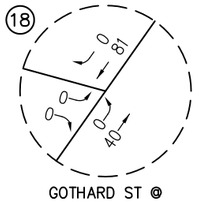


VERMONT ST/
GOTHARD ST @
MCFADDEN AVE



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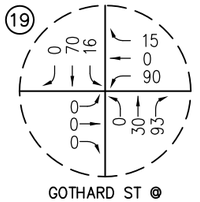
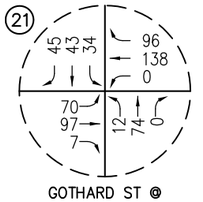
DRIVEWAY NO. 1



GOTHARD ST @
DRIVEWAY NO. 2/CENTER AVE



GOTHARD ST @
DRIVEWAY NO. 3



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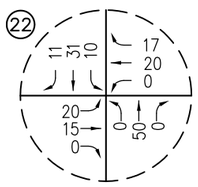

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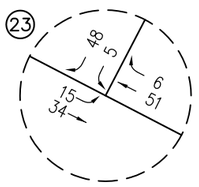
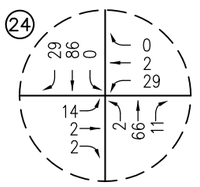
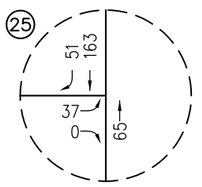
HEIL AVE



I-405 SB RAMPS @
CENTER AVE



BEACH BLVD @
MCFADDEN AVE



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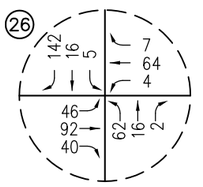

BEACH BLVD @
EDINGER AVE

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LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

KEY

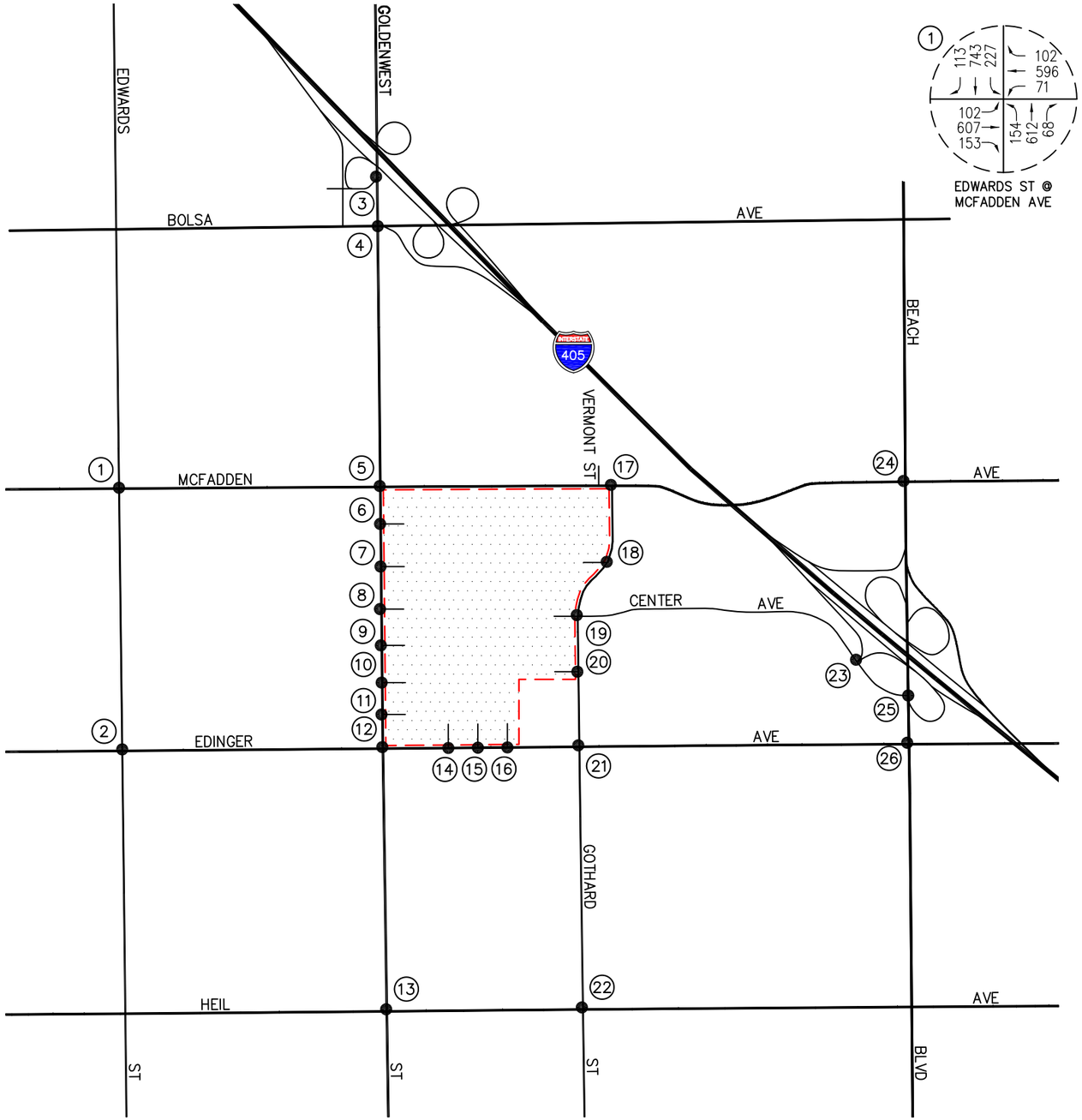
(#) = STUDY INTERSECTION

= PROJECT SITE

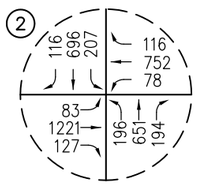
FIGURE 6-3

PM PEAK HOUR CUMULATIVE PROJECT TRAFFIC VOLUMES

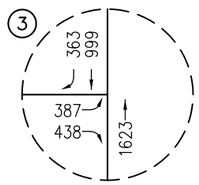
GOLDEN WEST COLLEGE VISION 2020 FACILITIES MASTER PLAN, HUNTINGTON BEACH



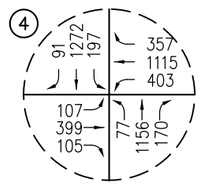
EDWARDS ST @
MCFADDEN AVE



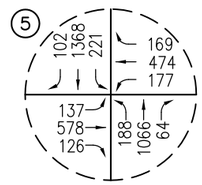
EDWARDS ST @
EDINGER AVE



GOLDENWEST ST @
I-405 SB RAMPS @



GOLDENWEST ST @
BOLSA AVE



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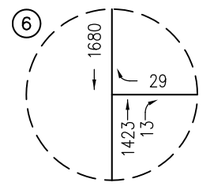

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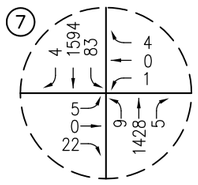

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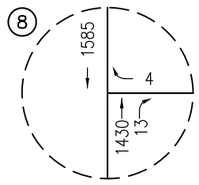

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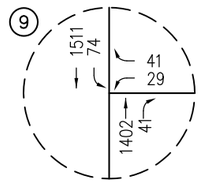
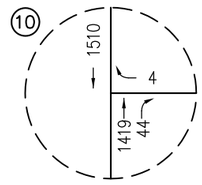
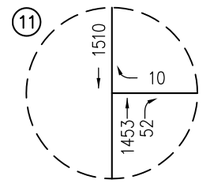
DRIVEWAY NO. 10



GOLDENWEST ST @
DRIVEWAY NO. 9
(GOLDEN WEST COLLEGE)



GOLDENWEST ST @
DRIVEWAY NO. 8



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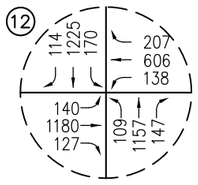
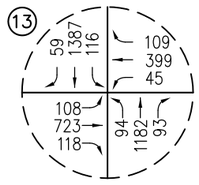
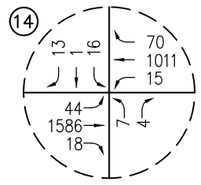
DRIVEWAY NO. 7



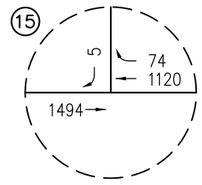
GOLDENWEST ST @
EDINGER AVE



GOLDENWEST ST @
HEIL AVE



DRIVEWAY NO. 6
(GOLDEN WEST COLLEGE) @
EDINGER AVE



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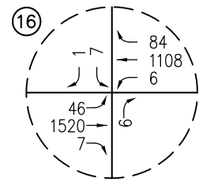
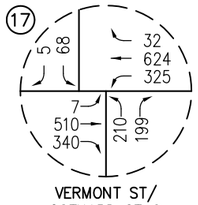
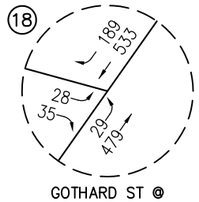


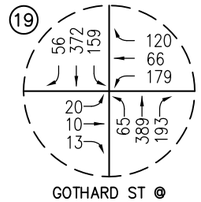
DRIVEWAY NO. 4 @
EDINGER AVE



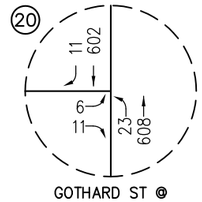
VERMONT ST/
GOTHARD ST @
MCFADDEN AVE



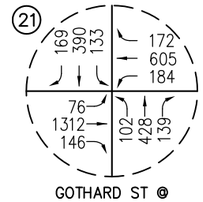
GOTHARD ST @
DRIVEWAY NO. 1



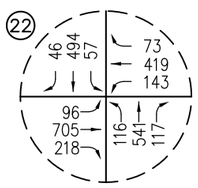
GOTHARD ST @
DRIVEWAY NO. 2/CENTER AVE



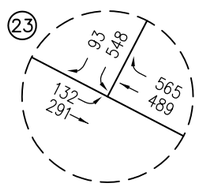
GOTHARD ST @
DRIVEWAY NO. 3



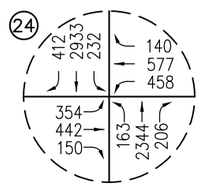
GOTHARD ST @
EDINGER AVE



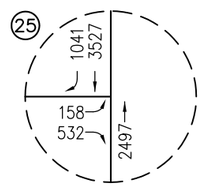
GOTHARD ST @
HEIL AVE



I-405 SB RAMPS @
CENTER AVE



BEACH BLVD @
MCFADDEN AVE



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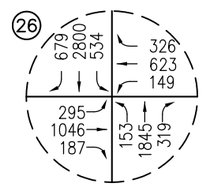


BEACH BLVD @
EDINGER AVE

n:\3300\21333396 - coast community college district, orange county\3396-2 golden west college\dwg\3396-2 f6-4.dwg LDP 14:34:33 12-11-2014 aguilar

LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

KEY

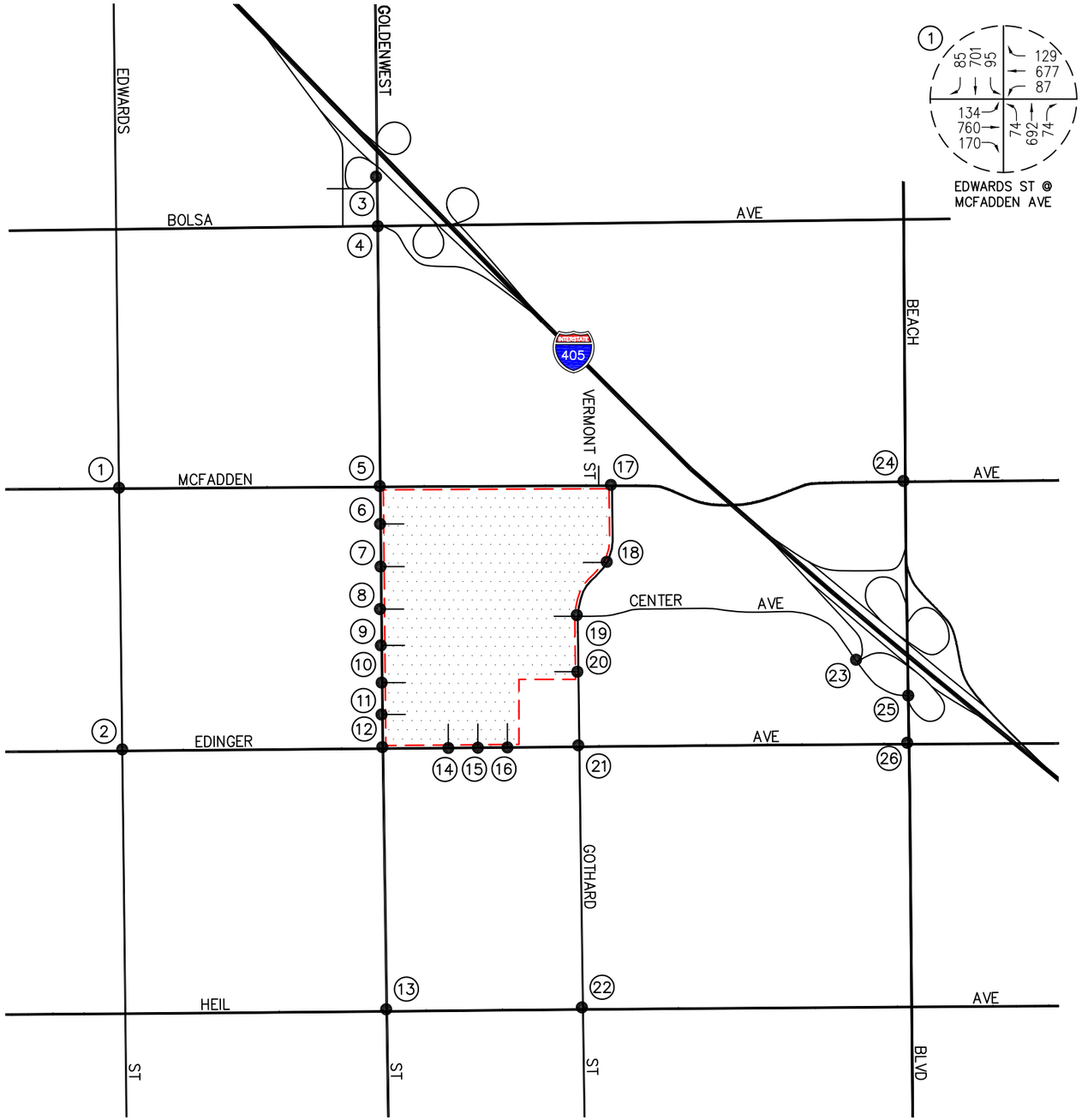
(#) = STUDY INTERSECTION

= PROJECT SITE

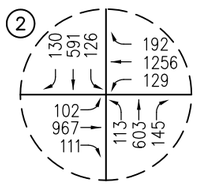
FIGURE 6-4

YEAR 2024 CUMULATIVE AM PEAK HOUR TRAFFIC VOLUMES

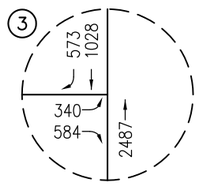
GOLDEN WEST COLLEGE VISION 2020 FACILITIES MASTER PLAN, HUNTINGTON BEACH



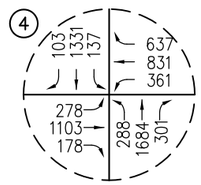
1 EDWARDS ST @ MCFADDEN AVE



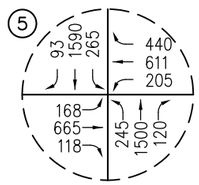
2 EDWARDS ST @ EDINGER AVE



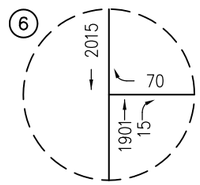
3 GOLDENWEST ST @ I-405 SB RAMPS @



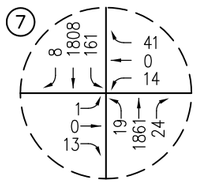
4 GOLDENWEST ST @ BOLSA AVE



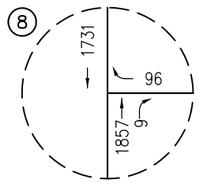
5 GOLDENWEST ST @ MCFADDEN AVE



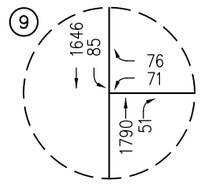
6 GOLDENWEST ST @ DRIVEWAY NO. 12



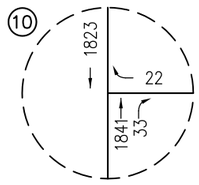
7 GOLDENWEST ST @ DRIVEWAY NO. 11



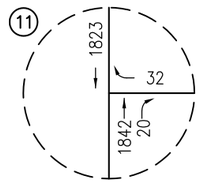
8 GOLDENWEST ST @ DRIVEWAY NO. 10



9 GOLDENWEST ST @ DRIVEWAY NO. 9 (GOLDEN WEST COLLEGE)



10 GOLDENWEST ST @ DRIVEWAY NO. 8



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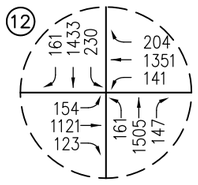
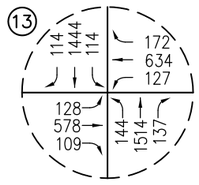
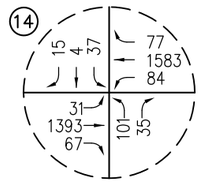


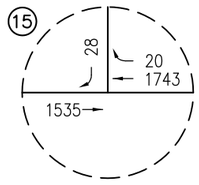
12 GOLDENWEST ST @ EDINGER AVE



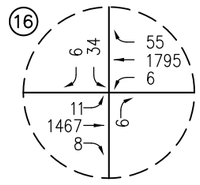
13 GOLDENWEST ST @ HEIL AVE



14 DRIVEWAY NO. 6 (GOLDEN WEST COLLEGE) @ EDINGER AVE



15 DRIVEWAY NO. 5 @ EDINGER AVE



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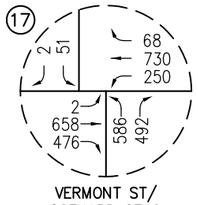
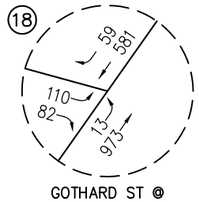
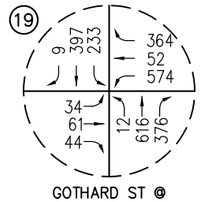


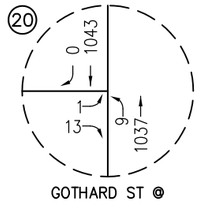
17 VERMONT ST/ GOTHARD ST @ MCFADDEN AVE



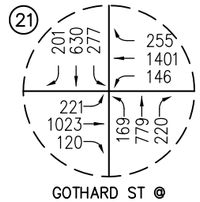
18 GOTHARD ST @ DRIVEWAY NO. 1



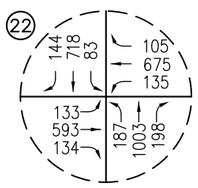
19 GOTHARD ST @ DRIVEWAY NO. 2/CENTER AVE



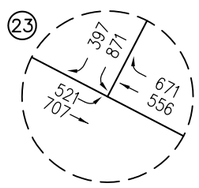
20 GOTHARD ST @ DRIVEWAY NO. 3



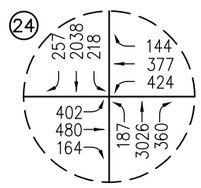
21 GOTHARD ST @ EDINGER AVE



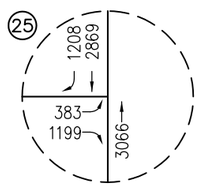
22 GOTHARD ST @ HEIL AVE



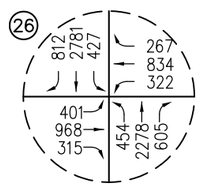
23 I-405 SB RAMPS @ CENTER AVE



24 BEACH BLVD @ MCFADDEN AVE



25 BEACH BLVD @ CENTER AVE



26 BEACH BLVD @ EDINGER AVE

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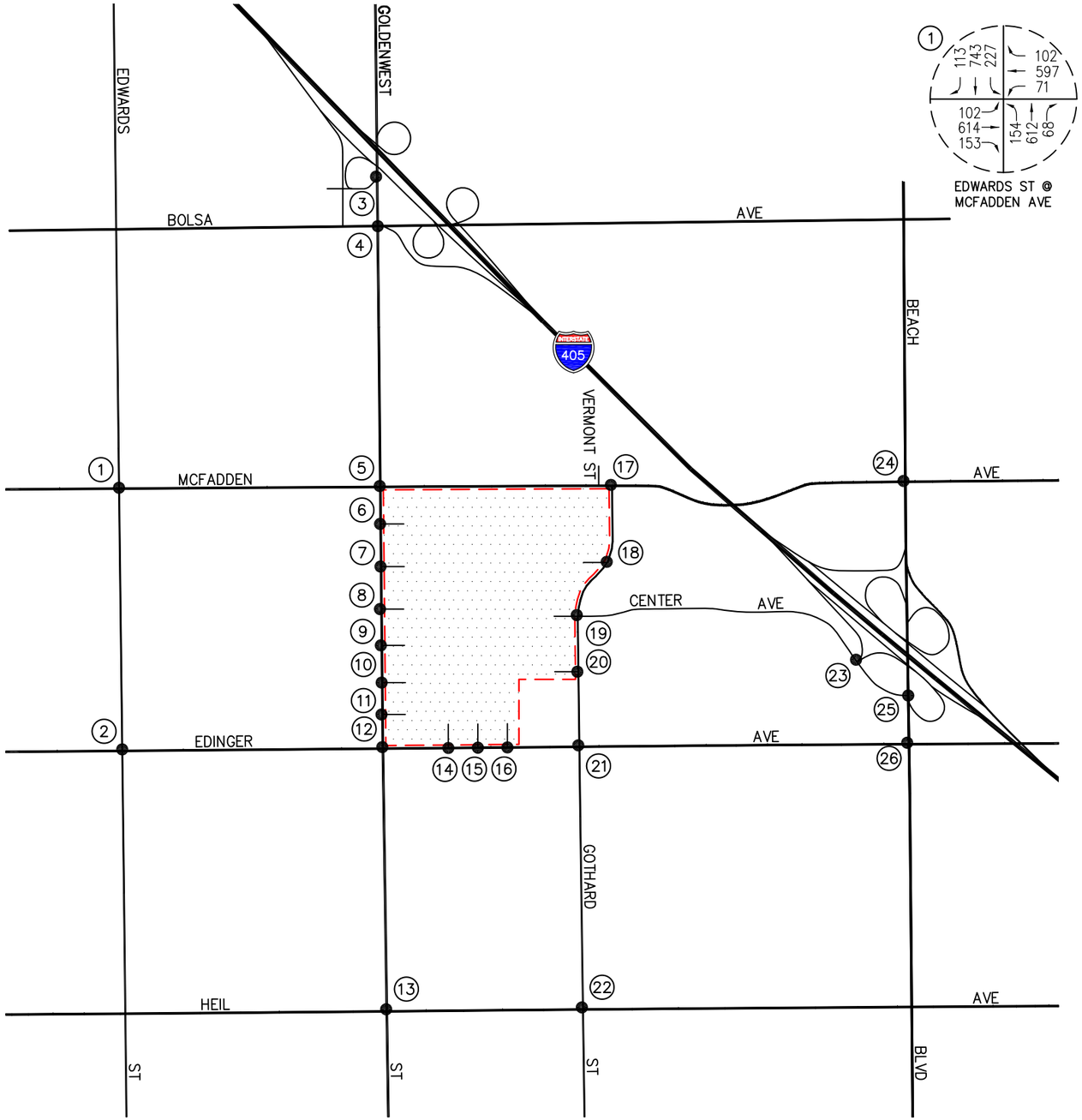
LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

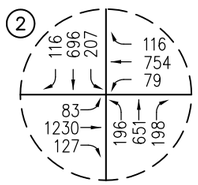
KEY
(#) = STUDY INTERSECTION
= PROJECT SITE

FIGURE 6-5

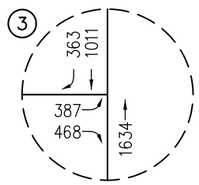
YEAR 2024 CUMULATIVE PM PEAK HOUR TRAFFIC VOLUMES
GOLDEN WEST COLLEGE VISION 2020 FACILITIES MASTER PLAN, HUNTINGTON BEACH



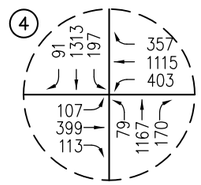
EDWARDS ST @
MCFADDEN AVE



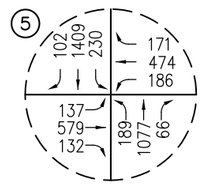
EDWARDS ST @
EDINGER AVE



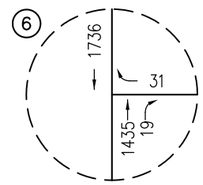
GOLDENWEST ST @
I-405 SB RAMPS @



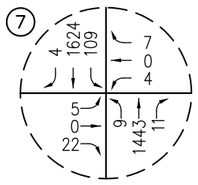
GOLDENWEST ST @
BOLSA AVE



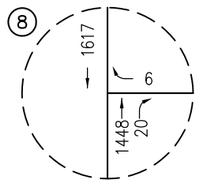
GOLDENWEST ST @
MCFADDEN AVE



GOLDENWEST ST @
DRIVEWAY NO. 12



GOLDENWEST ST @
DRIVEWAY NO. 11



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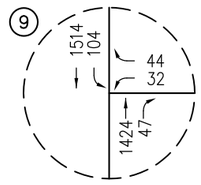
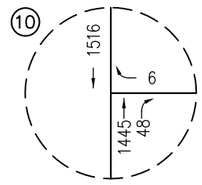
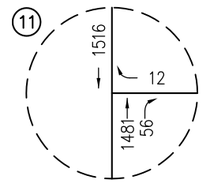
DRIVEWAY NO. 10



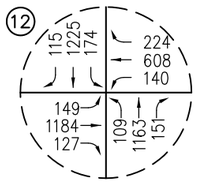
GOLDENWEST ST @
DRIVEWAY NO. 9
(GOLDEN WEST COLLEGE)



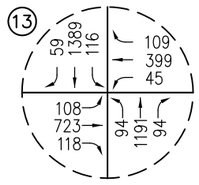
GOLDENWEST ST @
DRIVEWAY NO. 8



GOLDENWEST ST @
DRIVEWAY NO. 7



GOLDENWEST ST @
EDINGER AVE



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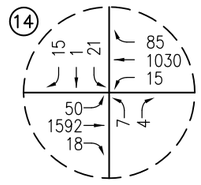

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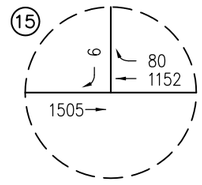
(GOLDEN WEST COLLEGE) @
EDINGER AVE



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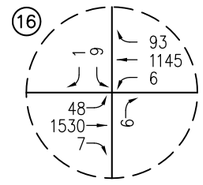

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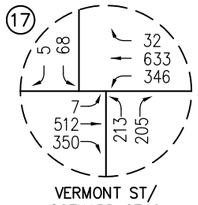
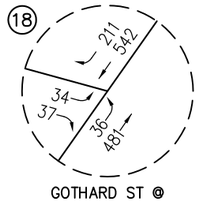


VERMONT ST/
GOTHARD ST @
MCFADDEN AVE



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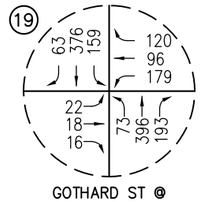

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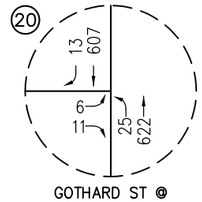
DRIVEWAY NO. 2/CENTER AVE



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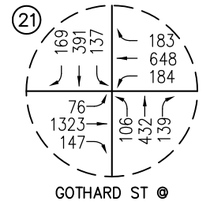

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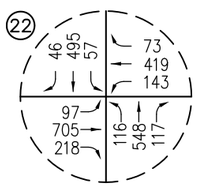
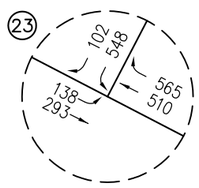
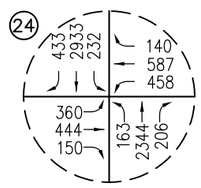


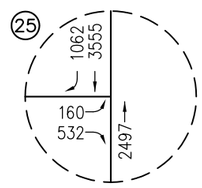
GOTHARD ST @
HEIL AVE



I-405 SB RAMPS @
CENTER AVE



BEACH BLVD @
MCFADDEN AVE



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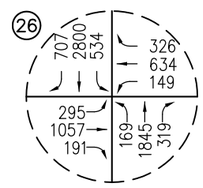

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EDINGER AVE

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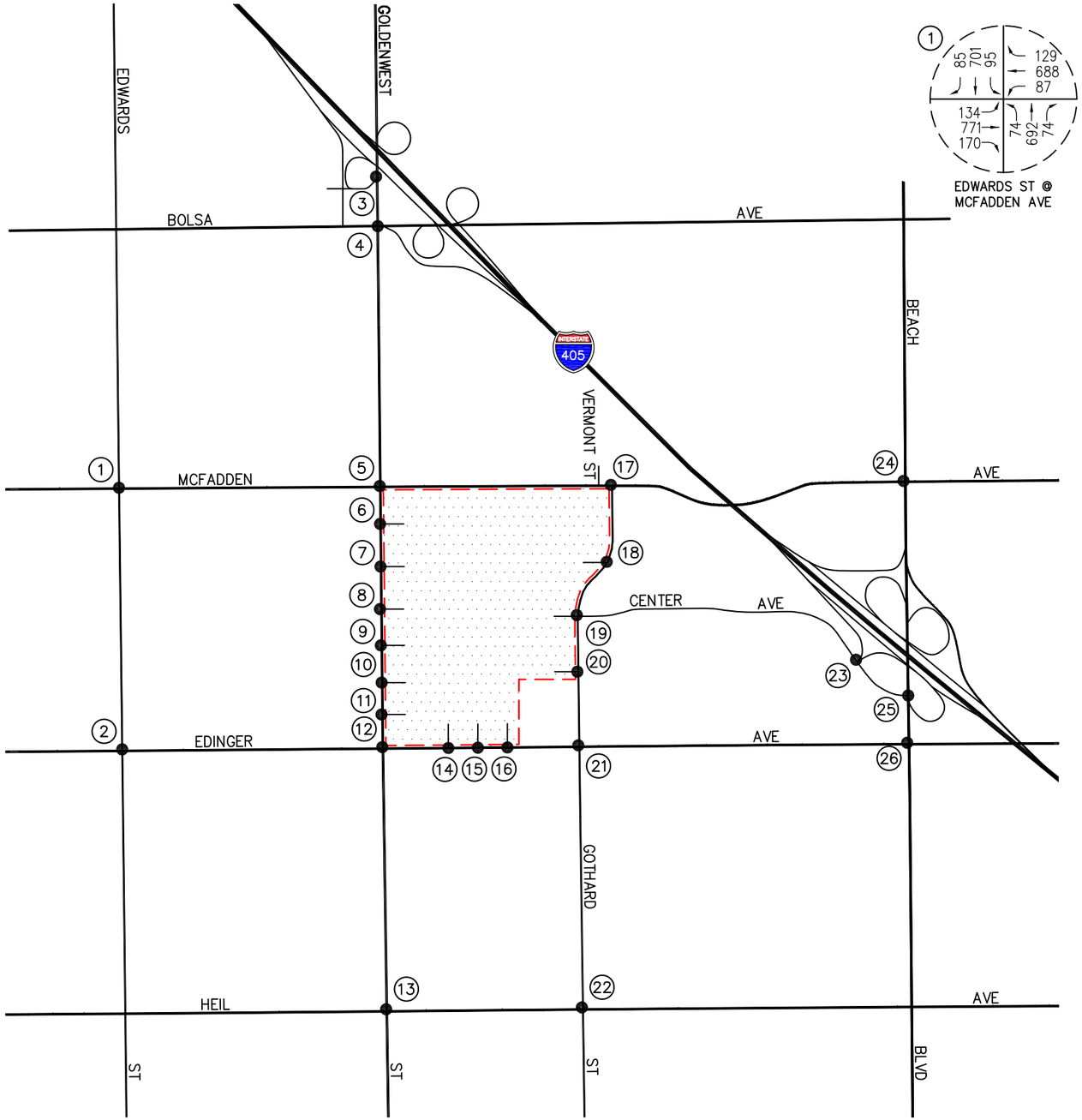
LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

KEY
(#) = STUDY INTERSECTION
= PROJECT SITE

FIGURE 6-6

YEAR 2024 CUMULATIVE PLUS PROJECT
AM PEAK HOUR TRAFFIC VOLUMES
GOLDEN WEST COLLEGE VISION 2020 FACILITIES MASTER PLAN, HUNTINGTON BEACH



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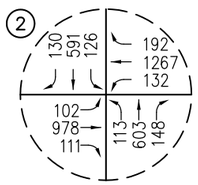

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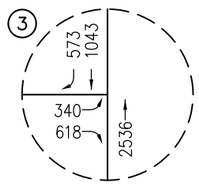
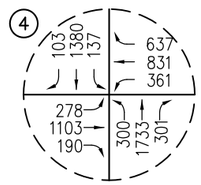


GOLDENWEST ST @
I-405 SB RAMPS @



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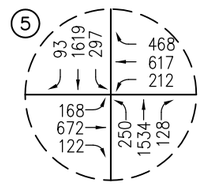

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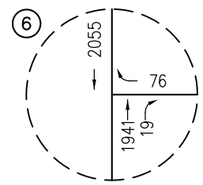

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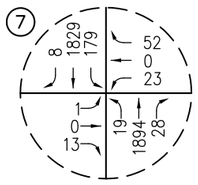

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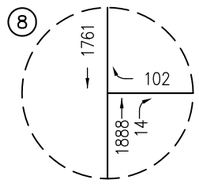

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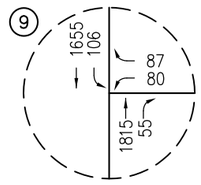

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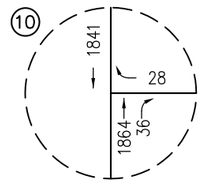
(GOLDEN WEST COLLEGE)



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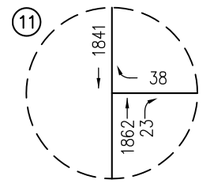

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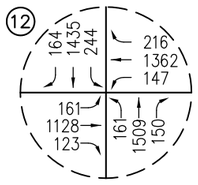

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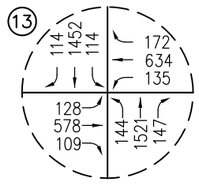
EDINGER AVE



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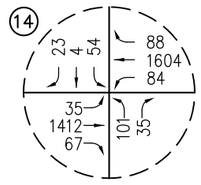
HEIL AVE



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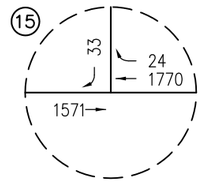
(GOLDEN WEST COLLEGE) @
EDINGER AVE



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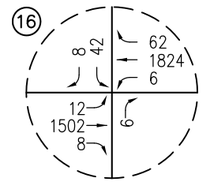

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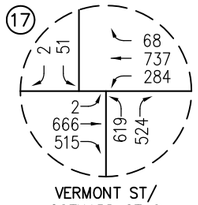
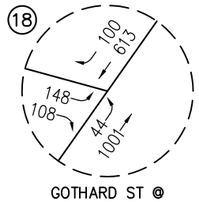


VERMONT ST/
GOTHARD ST @
MCFADDEN AVE



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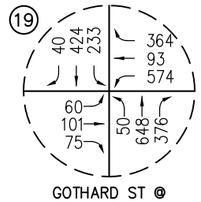
DRIVEWAY NO. 1



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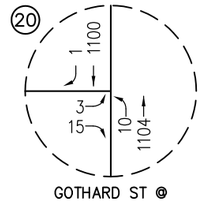

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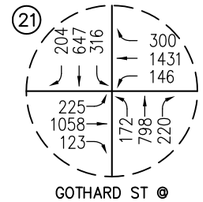

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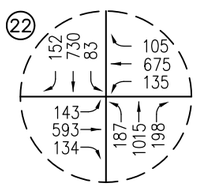
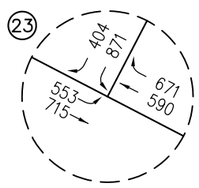
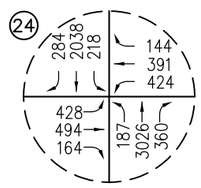


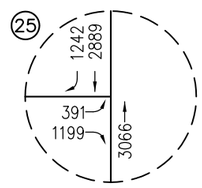
GOTHARD ST @
HEIL AVE



I-405 SB RAMPS @
CENTER AVE



BEACH BLVD @
MCFADDEN AVE



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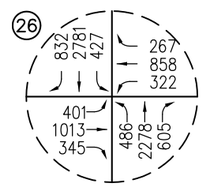

BEACH BLVD @
EDINGER AVE

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LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

KEY

(#) = STUDY INTERSECTION

= PROJECT SITE

FIGURE 6-7

YEAR 2024 CUMULATIVE PLUS PROJECT
PM PEAK HOUR TRAFFIC VOLUMES

GOLDEN WEST COLLEGE VISION 2020 FACILITIES MASTER PLAN, HUNTINGTON BEACH

7.0 TRAFFIC IMPACT ANALYSIS METHODOLOGY

The relative impact of the proposed Project during the AM peak hour and PM peak hour was evaluated based on analysis of future operating conditions at the twenty six (26) key study intersections, without, then with, the proposed Project. The previously discussed capacity analysis procedures were utilized to investigate the future volume-to-capacity relationships and service level characteristics at each study intersection. The significance of the potential impacts of the Project at each key intersection was then evaluated using the following traffic impact criteria.

7.1 Impact Criteria and Thresholds

7.1.1 *City of Huntington Beach*

For those study intersections within the jurisdiction of the City of Huntington Beach (i.e. all locations except intersections #3 and #24), impacts to local and regional transportation systems are considered significant if:

- An unacceptable peak hour Level of Service (LOS) at any of the key intersections is projected. According to the City of Huntington Beach, LOS C is the minimum acceptable condition that should be maintained during the peak commute hours for "Secondary Intersections". LOS D is the minimum acceptable condition that should be maintained during the peak commute hours for "Principal Intersections", and LOS E is the minimum acceptable condition that should be maintained during the peak commute hours for "Critical Intersections". Based on the above, the following summarizes the LOS required for each key study intersection:

LOS "C" Requirements	
1. Edwards Street at McFadden Avenue	19. Gothard Street at Dwy No. 2/Center Ave
2. Edwards Street at Edinger Avenue	20. Gothard Street at Driveway No. 3
13. Goldenwest Street at Heil Avenue	21. Gothard Street at Edinger Avenue
17. Vermont St/Gothard St at McFadden Avenue	22. Gothard Street at Heil Avenue
18. Gothard Street at Driveway No. 1	
LOS "D" Requirements	
4. Goldenwest Street at Bolsa Avenue	11. Goldenwest Street at Driveway No. 7
5. Goldenwest Street at McFadden Avenue	12. Goldenwest Street at Edinger Avenue
6. Goldenwest Street at Driveway No. 12	14. Driveway No. 6 at Edinger Avenue
7. Goldenwest Street at Driveway No. 11	15. Driveway No. 5 at Edinger Avenue
8. Goldenwest Street at Driveway No. 10	16. Driveway No. 4 at Edinger Avenue
9. Goldenwest Street at Driveway No. 9	23. I-405 SB Ramps at Center Avenue
10. Goldenwest Street at Driveway No. 8	25. Beach Boulevard at Center Avenue
LOS "E" Requirements	
26. Beach Boulevard at Edinger Avenue	

- The project increases traffic demand at the study intersection by 1% of capacity (ICU increase ≥ 0.010). At unsignalized intersections, a "significant" adverse traffic impact is defined as a project that adds 1% or more traffic delay (seconds per vehicle) at an intersection operating at an adverse LOS.

7.1.2 *City of Westminster*

For those study intersections within the jurisdiction of the City of Westminster (i.e. Goldenwest Street/I-405 SB Ramps and Beach Boulevard/McFadden Avenue), impacts to local and regional transportation systems are considered significant if:

- An unacceptable peak hour Level of Service (LOS) (i.e. LOS E or F) at any of the key intersections is projected. The City of Westminster considers LOS D (ICU = 0.801 - 0.900) to be the minimum acceptable LOS for all intersections; and

- The project increases traffic demand at the study intersection by 1% of capacity (ICU increase ≥ 0.010), causing or worsening LOS E or F (ICU > 0.901).

7.2 Traffic Impact Analysis Scenarios

The following scenarios are those for which volume/capacity calculations have been performed at the twenty six (26) key study intersections for existing plus project and Year 2024 traffic conditions:

A. Existing Traffic Conditions;
B. Existing Plus Project Traffic Conditions;
C. Scenario (B) with Improvements, if necessary;
D. Year 2024 Cumulative Traffic Conditions,
E. Year 2024 Cumulative Plus Project Traffic Conditions; and
F. Scenario (E) with Improvements, if necessary.

8.0 PEAK HOUR INTERSECTION CAPACITY ANALYSIS

8.1 Existing Plus Project Analysis

Table 8-1 summarizes the peak hour Level of Service results at the twenty six (26) key study intersections for existing plus project traffic conditions. The first column (1) of ICU/LOS values and HCM/LOS values in *Table 8-1* presents a summary of existing AM and PM peak hour traffic conditions (which were also presented in *Table 3-3*). The second column (2) lists existing plus project traffic conditions. The third column (3) shows the increase in ICU value and/or HCM value due to the added peak hour Project trips and indicates whether the traffic associated with the Project will have a significant impact based on the LOS standards and significant impact criteria defined in this report.

8.1.1 *Existing Plus Project Traffic Conditions*

Review of Columns 2 and 3 of *Table 8-1* indicates that traffic associated with the proposed Project will significantly impact two (2) of the twenty six (26) key study intersections, when compared to the LOS standards and significant impact criteria specified in this report. The remaining twenty four (24) key study intersections currently operate and are forecast to continue to operate at an acceptable service level during the AM and PM peak hours with the addition of Project generated traffic to existing traffic. The intersections operating at an adverse level of service under existing plus project traffic conditions are:

	AM Peak Hour		PM Peak Hour	
Key Intersection	ICU/HCM	LOS	ICU/HCM	LOS
7. Goldenwest Street at Driveway No. 11	41.4 s/v	E	620.8 s/v	F
16. Driveway No. 4 at Edinger Avenue	39.9 s/v	E	143.9 s/v	F

As shown in the with improvements row of *Table 8-1* for intersections #7 and #16, the implementation of improvements at the impacted intersections of Goldenwest Street/Driveway No. 11 and Driveway No. 4/Edinger Avenue completely offsets the impact of project traffic. The impacted key study intersections are forecast to operate at an acceptable LOS during the AM and PM peak hours with implementation of improvements.

Appendix D presents the existing plus project ICU/LOS and HCM/LOS calculations for the twenty six (26) key study intersections.

8.2 Year 2024 Traffic Conditions

Table 8-2 summarizes the peak hour Level of Service results at the twenty six (26) key study intersections for the Year 2024 horizon year. The first column (1) of ICU/LOS and HCM/LOS values in *Table 8-2* presents a summary of existing AM and PM peak hour traffic conditions (which were also presented in *Table 3-3*). The second column (2) lists projected cumulative traffic conditions (existing plus ambient plus cumulative projects traffic) based on existing intersection geometry, but without any traffic generated from the proposed Project. The third column (3) presents forecast Year 2024 traffic conditions with the addition of Project traffic. The fourth column

(4) shows the increase in ICU value and/or HCM value due to the added peak hour Project trips and indicates whether the traffic associated with the Project will have a significant impact based on the LOS standards and significant impact criteria defined in this report. The fifth column (5) indicates the anticipated level of service with planned and/or recommended improvements.

8.2.1 *Year 2024 Cumulative Traffic Conditions*

An analysis of future (Year 2024) cumulative traffic conditions indicates that the addition of ambient traffic growth and cumulative projects traffic will adversely impact nine (9) of the twenty six (26) key study intersections. The remaining seventeen (17) key study intersections are forecast to continue to operate at acceptable levels of service during the AM and PM peak hours with the addition of ambient traffic growth and cumulative projects traffic. The locations projected to operate at an adverse LOS in the Year 2024 are as follows:

	AM Peak Hour		PM Peak Hour	
Key Intersection	ICU/HCM	LOS	ICU/HCM	LOS
4. Goldenwest Street at Bolsa Avenue	---	---	0.976	E
7. Goldenwest Street at Driveway No. 11	61.3 s/v	F	1391.5 s/v	F
12. Goldenwest Street at Edinger Avenue	---	---	0.905	E
16. Driveway No. 4 at Edinger Avenue	78.2 s/v	F	763.9 s/v	F
17. Vermont St/Gothard St at McFadden Ave	---	---	0.851	D
19. Gothard Street at Dwy No. 2/Center Ave	---	---	0.878	D
21. Gothard Street at Edinger Avenue	---	---	0.897	D
23. I-405 SB Ramps at Center Avenue	---	---	1.007	F
24. Beach Boulevard at McFadden Avenue	0.905	E	0.926	E

8.2.2 *Year 2024 Cumulative Plus Project Conditions*

Review of Columns 3 and 4 of *Table 8-2* indicates that traffic associated with the proposed Project will significantly impact nine (9) of the twenty six (26) key study intersections, when compared to the LOS standards and significant impact criteria specified in this report. Although the intersection of Beach Boulevard/McFadden Avenue is forecast to operate at unacceptable LOS E during the AM and PM peak hours with the addition of project traffic, the proposed Project is expected to add less than 0.010 to the ICU value. The remaining sixteen (16) key study intersections are forecast to continue to operate at an acceptable service level during the AM and PM peak hours with the addition of Project generated traffic to existing traffic, ambient growth traffic and cumulative projects traffic. The intersections operating at an adverse level of service under Year 2024 cumulative plus project traffic conditions are:

TABLE 8-1

EXISTING PLUS PROJECT PEAK HOUR INTERSECTION CAPACITY ANALYSIS

Key Intersection	Time Period	Minimum Acceptable LOS	(1) Existing Traffic Conditions		(2) Existing Plus Project Traffic Conditions		(3) Significant Impact	
			ICU/HCM	LOS	ICU/HCM	LOS	Increase	Yes/No
1. Edwards Street at McFadden Avenue (HB)	AM	LOS C	0.507	A	0.507	A	0.000	No
	PM		0.495	A	0.498	A	0.003	No
2. Edwards Street at Edinger Avenue (HB)	AM	LOS C	0.568	A	0.570	A	0.002	No
	PM		0.517	A	0.519	A	0.002	No
3. Goldenwest Street at I-405 SB Ramps (WM)	AM	LOS D	0.420	A	0.421	A	0.001	No
	PM		0.568	A	0.584	A	0.016	No
4. Goldenwest Street at Bolsa Avenue (HB)	AM	LOS D	0.537	A	0.539	A	0.002	No
	PM		0.787	C	0.796	C	0.009	No
5. Goldenwest Street at McFadden Avenue (HB)	AM	LOS D	0.585	A	0.599	A	0.014	No
	PM		0.704	C	0.729	C	0.025	No
6. Goldenwest Street at Driveway No. 12 (HB)	AM	LOS D	10.9 s/v	B	11.0 s/v	B	0.1 s/v	No
	PM		12.7 s/v	B	13.0 s/v	B	0.3 s/v	No
7. Goldenwest Street at Driveway No. 11 (HB)	AM	LOS D	25.8 s/v	D	**41.4 s/v**	**E**	**15.6 s/v**	**Yes**
	PM		**222.4 s/v**	**F**	**620.8 s/v**	**F**	**398.4 s/v**	**Yes**
➢ With Improvements	AM	LOS D	---	---	17.9 s/v	C	---	---
	PM		---	---	18.0 s/v	C	---	---
8. Goldenwest Street at Driveway No. 10 (HB)	AM	LOS D	10.7 s/v	B	10.8 s/v	B	0.1 s/v	No
	PM		12.9 s/v	B	13.1 s/v	B	0.2 s/v	No
9. Goldenwest Street at Driveway No. 9 (HB)	AM	LOS D	0.303	A	0.319	A	0.016	No
	PM		0.385	A	0.403	A	0.018	No
10. Goldenwest Street at Driveway No. 8 (HB)	AM	LOS D	10.8 s/v	B	10.9 s/v	B	0.1 s/v	No
	PM		12.0 s/v	B	12.2 s/v	B	0.2 s/v	No
11. Goldenwest Street at Driveway No. 7 (HB)	AM	LOS D	10.9 s/v	B	11.1 s/v	B	0.2 s/v	No
	PM		12.0 s/v	B	12.2 s/v	B	0.2 s/v	No
12. Goldenwest Street at Edinger Avenue (HB)	AM	LOS D	0.571	A	0.577	A	0.006	No
	PM		0.669	B	0.687	B	0.018	No
13. Goldenwest Street at Heil Avenue (HB)	AM	LOS C	0.500	A	0.500	A	0.000	No
	PM		0.535	A	0.541	A	0.006	No

Notes:

- **Bold ICU/LOS** or **HCM/LOS** values indicate adverse service levels based on City of Huntington Beach and City of Westminster LOS standards
- s/v = seconds per vehicle
- HB = City of Huntington Beach and WM = City of Westminster

TABLE 8-1 (CONTINUED)
EXISTING PLUS PROJECT PEAK HOUR INTERSECTION CAPACITY ANALYSIS

Key Intersection	Time Period	Minimum Acceptable LOS	(1) Existing Traffic Conditions		(2) Existing Plus Project Traffic Conditions		(3) Significant Impact	
			ICU/HCM	LOS	ICU/HCM	LOS	Increase	Yes/No
14. Driveway No. 6 at Edinger Avenue (HB)	AM	LOS D	0.313	A	0.317	A	0.004	No
	PM		0.360	A	0.374	A	0.014	No
15. Driveway No. 5 at Edinger Avenue (HB)	AM	LOS D	10.1 s/v	B	10.2 s/v	B	0.1 s/v	No
	PM		11.6 s/v	B	11.8 s/v	B	0.2 s/v	No
16. Driveway No.4 at Edinger Avenue (HB)	AM	LOS D	**35.3 s/v**	**E**	**39.9 s/v**	**E**	**4.6 s/v**	**Yes**
	PM		**102.9 s/v**	**F**	**143.9 s/v**	**F**	**41.0 s/v**	**Yes**
➢ With Improvements	AM	LOS D	---	---	10.9 s/v	B	---	---
	PM		---	---	12.4 s/v	B	---	---
17. Vermont St/Gothard St at McFadden Avenue (HB)	AM	LOS C	0.522	A	0.541	A	0.019	No
	PM		0.674	B	0.726	C	0.052	No
18. Gothard Street at Driveway No. 1 (HB)	AM	LOS C	11.1 s/v	B	11.5 s/v	B	0.4 s/v	No
	PM		12.2 s/v	B	13.9 s/v	B	1.7 s/v	No
19. Gothard Street at Driveway No. 2/Center Ave (HB)	AM	LOS C	0.309	A	0.317	A	0.008	No
	PM		0.648	B	0.699	B	0.051	No
20. Gothard Street at Driveway No. 3 (HB)	AM	LOS C	11.3 s/v	B	11.4 s/v	B	0.1 s/v	No
	PM		11.9 s/v	B	14.1 s/v	B	2.2 s/v	No
21. Gothard Street at Edinger Avenue (HB)	AM	LOS C	0.505	A	0.510	A	0.005	No
	PM		0.638	B	0.684	B	0.046	No
22. Gothard Street at Heil Avenue (HB)	AM	LOS C	0.450	A	0.450	A	0.000	No
	PM		0.520	A	0.537	A	0.017	No
23. I-405 SB Ramps at Center Avenue (HB)	AM	LOS D	0.503	A	0.507	A	0.004	No
	PM		0.824	D	0.842	D	0.018	No
24. Beach Boulevard at McFadden Avenue (WM)	AM	LOS D	0.736	C	0.740	C	0.004	No
	PM		0.751	C	0.755	C	0.004	No
25. Beach Boulevard at Center Avenue (HB)	AM	LOS D	0.596	A	0.600	B	0.004	No
	PM		0.701	C	0.701	C	0.000	No
26. Beach Boulevard at Edinger Avenue (HB)	AM	LOS E	0.670	B	0.675	B	0.005	No
	PM		0.786	C	0.794	C	0.008	No

Notes:
- **Bold ICU/LOS** or **HCM/LOS** values indicate adverse service levels based on City of Huntington Beach and City of Westminster LOS standards
- s/v = seconds per vehicle
- HB = City of Huntington Beach and WM = City of Westminster

TABLE 8-2

YEAR 2024 PEAK HOUR INTERSECTION CAPACITY ANALYSIS

Key Intersection	Time Period	Minimum Acceptable LOS	(1) Existing Traffic Conditions		(2) Year 2024 Cumulative Traffic Conditions		(3) Year 2024 Cumulative Plus Project Traffic Conditions		(4) Significant Impact		(5) With Improvements	
			ICU/HCM	LOS	ICU/HCM	LOS	ICU/HCM	LOS	Increase	Yes/No	ICU/HCM	LOS
1. Edwards Street at McFadden Ave (HB)	AM	LOS C	0.507	A	0.628	B	0.628	B	0.000	No	---	---
	PM		0.495	A	0.609	B	0.612	B	0.003	No	---	---
2. Edwards Street at Edinger Avenue (HB)	AM	LOS C	0.568	A	0.689	B	0.692	B	0.003	No	---	---
	PM		0.517	A	0.635	B	0.637	B	0.002	No	---	---
3. Goldenwest Street at I-405 SB Ramps (WM)	AM	LOS D	0.420	A	0.530	A	0.538	A	0.008	No	---	---
	PM		0.568	A	0.719	C	0.735	C	0.016	No	---	---
4. Goldenwest Street at Bolsa Avenue (HB)	AM	LOS D	0.537	A	0.676	B	0.678	B	0.002	No	0.620	B
	PM		0.787	C	**0.976**	**E**	**0.986**	**E**	**0.010**	**Yes**	**0.946**	**E**
5. Goldenwest Street at McFadden Ave (HB)	AM	LOS D	0.585	A	0.723	C	0.737	C	0.014	No	0.737	C
	PM		0.704	C	0.882	D	**0.907**	**E**	**0.025**	**Yes**	0.855	D
6. Goldenwest Street at Driveway No. 12 (HB)	AM	LOS D	10.9 s/v	B	12.1 s/v	B	12.2 s/v	B	0.1 s/v	No	---	---
	PM		12.7 s/v	B	15.2 s/v	C	15.7 s/v	C	0.5 s/v	No	---	---
7. Goldenwest Street at Driveway No. 11 (HB)	AM	LOS D	25.8 s/v	D	**61.3 s/v**	**F**	**99.3 s/v**	**F**	**38.0 s/v**	**Yes**	27.1 s/v	D
	PM		**222.4 s/v**	**F**	**1391.5 s/v**	**F**	**3094.5 s/v**	**F**	**1703.0 s/v**	**Yes**	31.1 s/v	D
8. Goldenwest Street at Driveway No. 10 (HB)	AM	LOS D	10.7 s/v	B	11.8 s/v	B	11.9 s/v	B	0.1 s/v	No	---	---
	PM		12.9 s/v	B	15.7 s/v	C	16.1 s/v	C	0.4 s/v	No	---	---
9. Goldenwest Street at Driveway No. 9 (HB)	AM	LOS D	0.303	A	0.379	A	0.395	A	0.016	No	---	---
	PM		0.385	A	0.481	A	0.499	A	0.018	No	---	---

Notes:

- **Bold ICU/LOS** or **HCM/LOS** values indicate adverse service levels based on City of Huntington Beach and City of Westminster LOS standards
- s/v = seconds per vehicle
- HB = City of Huntington Beach and WM = City of Westminster

TABLE 8-2

YEAR 2024 PEAK HOUR INTERSECTION CAPACITY ANALYSIS

Key Intersection	Time Period	Minimum Acceptable LOS	(1) Existing Traffic Conditions		(2) Year 2024 Cumulative Traffic Conditions		(3) Year 2024 Cumulative Plus Project Traffic Conditions		(4) Significant Impact		(5) With Improvements	
			ICU/HCM	LOS	ICU/HCM	LOS	ICU/HCM	LOS	Increase	Yes/No	ICU/HCM	LOS
10. Goldenwest Street at Driveway No. 8 (HB)	AM	LOS D	10.8 s/v	B	11.9 s/v	B	12.0 s/v	B	0.1 s/v	No	---	---
	PM		12.0 s/v	B	13.8 s/v	B	14.1 s/v	B	0.3 s/v	No	---	---
11. Goldenwest Street at Driveway No. 7 (HB)	AM	LOS D	10.9 s/v	B	12.1 s/v	B	12.3 s/v	B	0.2 s/v	No	---	---
	PM		12.0 s/v	B	14.0 s/v	B	14.2 s/v	B	0.2 s/v	No	---	---
12. Goldenwest Street at Edinger Avenue (HB)	AM	LOS D	0.571	A	0.743	C	0.749	C	0.006	No	0.749	C
	PM		0.669	B	**0.905**	**E**	**0.923**	**E**	**0.018**	**Yes**	0.881	D
13. Goldenwest Street at Heil Avenue (HB)	AM	LOS C	0.500	A	0.616	B	0.617	B	0.001	No	---	---
	PM		0.535	A	0.676	B	0.677	B	0.001	No	---	---
14. Driveway No. 6 at Edinger Avenue (HB)	AM	LOS D	0.313	A	0.383	A	0.387	A	0.004	No	---	---
	PM		0.360	A	0.464	A	0.478	A	0.014	No	---	---
15. Driveway No. 5 at Edinger Avenue (HB)	AM	LOS D	10.1 s/v	B	11.1 s/v	B	11.2 s/v	B	0.1 s/v	No	---	---
	PM		11.6 s/v	B	13.4 s/v	B	13.7 s/v	B	0.3 s/v	No	---	---
16. Driveway No.4 at Edinger Avenue (HB)	AM	LOS D	**35.3 s/v**	**E**	**78.2 s/v**	**F**	**92.5 s/v**	**F**	**14.3 s/v**	**Yes**	13.3 s/v	B
	PM		**102.9 s/v**	**F**	**763.9 s/v**	**F**	**1056.3 s/v**	**F**	**292.4 s/v**	**Yes**	16.6 s/v	C
17. Vermont/Gothard at McFadden Ave (HB)	AM	LOS C	0.522	A	0.651	B	0.671	B	0.020	No	0.613	B
	PM		0.674	B	**0.851**	**D**	**0.904**	**E**	**0.053**	**Yes**	0.778	C
18. Gothard Street at Driveway No. 1 (HB)	AM	LOS C	11.1 s/v	B	12.2 s/v	B	12.6 s/v	B	0.4 s/v	No	---	---
	PM		12.2 s/v	B	14.6 s/v	B	17.5 s/v	C	2.9 s/v	No	---	---

Notes:

- **Bold ICU/LOS** or **HCM/LOS** values indicate adverse service levels based on City of Huntington Beach and City of Westminster LOS standards
- s/v = seconds per vehicle
- HB = City of Huntington Beach and WM = City of Westminster

TABLE 8-2

YEAR 2024 PEAK HOUR INTERSECTION CAPACITY ANALYSIS

Key Intersection	Time Period	Minimum Acceptable LOS	(1) Existing Traffic Conditions		(2) Year 2024 Cumulative Traffic Conditions		(3) Year 2024 Cumulative Plus Project Traffic Conditions		(4) Significant Impact		(5) With Improvements	
			ICU/HCM	LOS	ICU/HCM	LOS	ICU/HCM	LOS	Increase	Yes/No	ICU/HCM	LOS
19. Gothard St at Dwy No. 2/Center Ave (HB)	AM	LOS C	0.309	A	0.434	A	0.442	A	0.008	No	0.457	A
	PM		0.648	B	**0.878**	**D**	**0.929**	**E**	**0.051**	**Yes**	0.792	C
20. Gothard Street at Driveway No. 3 (HB)	AM	LOS C	11.3 s/v	B	13.7 s/v	B	13.9 s/v	B	0.2 s/v	No	---	---
	PM		11.9 s/v	B	14.5 s/v	B	19.0 s/v	C	4.5 s/v	No	---	---
21. Gothard Street at Edinger Avenue (HB)	AM	LOS C	0.505	A	0.669	B	0.674	B	0.005	No	0.674	B
	PM		0.638	B	**0.897**	**D**	**0.942**	**E**	**0.045**	**Yes**	**0.884**	**D**
22. Gothard Street at Heil Avenue (HB)	AM	LOS C	0.450	A	0.555	A	0.555	A	0.000	No	---	---
	PM		0.520	A	0.671	B	0.680	B	0.009	No	---	---
23. I-405 SB Ramps at Center Avenue (HB)	AM	LOS D	0.503	A	0.621	B	0.625	B	0.004	No	0.464	A
	PM		0.824	D	**1.007**	**F**	**1.026**	**F**	**0.019**	**Yes**	0.805	D
24. Beach Boulevard at McFadden Ave (WM)	AM	LOS D	0.736	C	**0.905**	**E**	**0.913**	**E**	0.008	No	---	---
	PM		0.751	C	**0.926**	**E**	**0.930**	**E**	0.004	No	---	---
25. Beach Boulevard at Center Avenue (HB)	AM	LOS D	0.596	A	0.725	C	0.729	C	0.004	No	---	---
	PM		0.701	C	0.854	D	0.854	D	0.000	No	---	---
26. Beach Boulevard at Edinger Ave (HB)	AM	LOS E	0.670	B	0.840	D	0.842	D	0.002	No	---	---
	PM		0.786	C	0.985	E	0.993	E	0.008	No	---	---

Notes:

- **Bold ICU/LOS** or **HCM/LOS** values indicate adverse service levels based on City of Huntington Beach and City of Westminster LOS standards
- s/v = seconds per vehicle
- HB = City of Huntington Beach and WM = City of Westminster

Key Intersection	AM Peak Hour ICU/HCM	AM Peak Hour LOS	PM Peak Hour ICU/HCM	PM Peak Hour LOS
4. Goldenwest Street at Bolsa Avenue	---	---	0.986	E
5. Goldenwest Street at McFadden Avenue	---	---	0.907	E
7. Goldenwest Street at Driveway No. 11	99.3 s/v	F	3094.5 s/v	F
12. Goldenwest Street at Edinger Avenue	---	---	0.923	E
16. Driveway No. 4 at Edinger Avenue	92.5 s/v	F	1056.3 s/v	F
17. Vermont St/Gothard St at McFadden Ave	---	---	0.904	E
19. Gothard Street at Dwy No. 2/Center Ave	---	---	0.929	E
21. Gothard Street at Edinger Avenue	---	---	0.942	E
23. I-405 SB Ramps at Center Avenue	---	---	1.026	F

As shown in Column 5 of *Table 8-2*, the implementation of improvements at the impacted intersections completely offsets the impact of the proposed project.

Appendix E presents the Year 2024 plus project ICU/LOS and HCM/LOS calculations for the twenty six (26) key study intersections.

9.0 STATE OF CALIFORNIA (CALTRANS) METHODOLOGY

In conformance with the current Caltrans *Guide for the Preparation of Traffic Impact Studies*, existing and projected AM and PM peak hour operating conditions at the five (5) state-controlled study intersections within the study area have been evaluated using the *Highway Capacity Manual 2000* (HCM 2000 for signalized intersections) operations method of analysis. These state-controlled locations include the following five of the twenty six study intersections:

3. Goldenwest Street at I-405 SB Ramps
23. I-405 SB Ramps at Center Avenue
24. Beach Boulevard at McFadden Avenue
25. Beach Boulevard at Center Avenue
26. Beach Boulevard at Edinger Avenue[14]

Caltrans "endeavors to maintain a target LOS at the transition between LOS "C" and LOS "D" on State highway facilities"; it does not require that LOS "D" (shall) be maintained. However, Caltrans acknowledges that LOS D may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS. For this analysis, LOS D is the target level of service standard for four of the five state-controlled study intersections. The lone exception is the CMP intersection of Beach Boulevard/Edinger Avenue, where LOS E is the target level of service standard, consistent with City of Huntington Beach requirements. The aforementioned level of service standards will be utilized to assess the project impacts at the state-controlled study intersections.

9.1 Highway Capacity Manual (HCM) Method of Analysis (Signalized Intersections)

Based on the HCM operations method of analysis, level of service for signalized intersections is defined in terms of control delay, which is a measure of driver discomfort, frustration, fuel consumption, and lost travel time. The delay experienced by a motorist is made up of a number of factors that relate to control, geometries, traffic, and incidents. Total delay is the difference between the travel time actually experienced and the reference travel time that would result during ideal conditions: in the absence of traffic control, in the absence of geometric delay, in the absence of any incidents, and when there are no other vehicles on the road.

In Chapter 16 of the HCM, only the portion of total delay attributed to the control facility is quantified. This delay is called *control delay*. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. In contrast, in previous versions of the HCM (1994 and earlier), delay included only stopped delay.

Specifically, LOS criteria for traffic signals are stated in terms of the average control delay per vehicle. The six qualitative categories of Level of Service that have been defined along with the corresponding HCM control delay value range for signalized intersections are shown in ***Table 9-1***.

[14] Orange County Congestion Management Program (CMP) intersection.

TABLE 9-1

LEVEL OF SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS (HCM METHODOLOGY)[15]

Level of Service (LOS)	Control Delay Per Vehicle (seconds/vehicle)	Level of Service Description
A	$\leq$ 10.0	This level of service occurs when progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.
B	> 10.0 and $\leq$ 20.0	This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of average delay.
C	> 20.0 and $\leq$ 35.0	Average traffic delays. These higher delays may result from fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.
D	> 35.0 and $\leq$ 55.0	Long traffic delays At level D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high *v/c* ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
E	> 55.0 and $\leq$ 80.0	Very long traffic delays This level is considered by many agencies (i.e. SANBAG) to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high *v/c* ratios. Individual cycle failures are frequent occurrences.
F	$\geq$ 80.0	Severe congestion This level, considered to be unacceptable to most drivers, often occurs with over saturation, that is, when arrival flow rates exceed the capacity of the intersection. It may also occur at high *v/c* ratios below 1.0 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing factors to such delay levels.

[15] Source: *Highway Capacity Manual 2000*, Chapter 16 (Signalized Intersections).

9.2 Existing Plus Project Traffic Conditions

Table 9-2 summarizes the existing plus project peak hour HCM level of service results at the five (5) state-controlled study intersections within the study area. The first column (1) of HCM/LOS values in *Table 9-2* presents a summary of existing traffic conditions. The second column (2) presents existing plus project traffic conditions. The third column (3) indicates whether the traffic associated with the Project will have a significant impact based on the LOS standards defined in this report. The fourth column (4) indicates the anticipated level of service with planned and/or recommended improvements.

9.2.1 *Existing Traffic Conditions*

Review of Column 1 of *Table 9-2* indicates that the five (5) state-controlled study intersections currently operate at acceptable LOS D or better during the AM and PM peak hours.

9.2.2 *Existing Plus Project Traffic Conditions*

Review of Columns 2 and 3 of *Table 9-2* indicates that traffic associated with the proposed Project ***will not*** significantly impact any of the five (5) state-controlled study intersections, when compared to the LOS standards specified in this report. The five (5) state-controlled study intersections are forecast to continue to operate at acceptable LOS D or better with the addition of Project generated traffic to existing traffic.

9.3 Year 2024 Traffic Conditions

Table 9-3 summarizes the Year 2024 peak hour HCM level of service results at the five (5) state-controlled study intersections within the study area. The first column (1) of HCM/LOS values in *Table 9-3* presents a summary of existing traffic conditions. The second column (2) presents Year 2024 cumulative traffic conditions based on existing intersection geometry, but without any project generated traffic. The third column (3) presents future forecast traffic conditions with the addition of Project traffic. Column four (4) indicates whether the traffic associated with the Project will have a significant impact based on the LOS standards defined in this report. The fifth column (5) indicates the anticipated level of service with planned and/or recommended improvements.

9.3.1 *Year 2024 Cumulative Traffic Conditions*

An analysis of future (Year 2024) cumulative traffic conditions indicates that the addition of ambient traffic growth and cumulative projects traffic will adversely impact three of the five (5) state controlled study intersections. The state-controlled study intersection of the I-405 SB Ramps/Center Avenue, Beach Boulevard/McFadden Avenue and Beach Boulevard/Edinger Avenue are forecast to operate at unacceptable LOS E and/or LOS F during the AM and/or PM peak hours. The remaining two state-controlled study intersections are forecast to operate at acceptable LOS D or better during the AM and PM peak hours with the addition of ambient traffic growth and cumulative projects traffic.

9.3.2 *Year 2024 Cumulative Plus Project Traffic Conditions*

Review of Columns 3 and 4 of *Table 9-3* indicates that traffic associated with the proposed Project will significantly impact three of the five (5) state-controlled study intersections, when compared to the LOS standards specified in this report. The remaining two state-controlled study intersections are forecast to continue to operate at acceptable LOS D or better with the addition of project generated traffic in the Year 2024.

As shown in Column 5 of *Table 9-3*, the implementation of improvements at the impacted state-controlled intersections completely offsets the impact of the proposed project. The impacted state-controlled key study intersections are forecast to operate at an acceptable LOS during the AM and PM peak hours with implementation of improvements.

Appendix F presents the existing plus project and Year 2024 plus project HCM/LOS calculations for the five (5) state-controlled study intersections.

TABLE 9-2

EXISTING PLUS PROJECT PEAK HOUR INTERSECTION CAPACITY ANALYSIS – CALTRANS

Key Intersection		Time Period	(1) Existing Traffic Conditions		(2) Existing Plus Project Traffic Conditions		(3) Significant Impact	(4) With Improvements	
			HCM	LOS	HCM	LOS	Yes/No	HCM	LOS
3.	Goldenwest Street at I-405 SB Ramps	AM	13.6 s/v	B	14.0 s/v	B	No	---	---
		PM	13.0 s/v	B	13.5 s/v	B	No	---	---
23.	I-405 SB Ramps at Center Avenue	AM	19.0 s/v	B	19.2 s/v	B	No	---	---
		PM	35.7 s/v	D	38.2 s/v	D	No	---	---
24.	Beach Boulevard at McFadden Avenue	AM	39.6 s/v	D	39.9 s/v	D	No	---	---
		PM	40.0 s/v	D	40.6 s/v	D	No	---	---
25.	Beach Boulevard at Center Avenue	AM	10.7 s/v	B	10.7 s/v	B	No	---	---
		PM	21.9 s/v	C	21.9 s/v	C	No	---	---
26.	Beach Boulevard at Edinger Avenue	AM	35.6 s/v	D	35.6 s/v	D	No	---	---
		PM	45.5 s/v	D	46.2 s/v	D	No	---	---

Notes:

- s/v = seconds per vehicle

TABLE 9-3

YEAR 2024 PEAK HOUR INTERSECTION CAPACITY ANALYSIS – CALTRANS

Key Intersection		Time Period	(1) Existing Traffic Conditions		(2) Year 2024 Cumulative Traffic Conditions		(3) Year 2024 Cumulative Plus Project Traffic Conditions		(4) Significant Impact	(5) With Improvements	
			HCM	LOS	HCM	LOS	HCM	LOS	Yes/No	HCM	LOS
3.	Goldenwest Street at I-405 SB Ramps	AM	13.6 s/v	B	14.5 s/v	B	15.0 s/v	B	No	---	---
		PM	13.0 s/v	B	16.4 s/v	B	17.2 s/v	B	No	---	---
23.	I-405 SB Ramps at Center Avenue	AM	19.0 s/v	B	21.6 s/v	C	21.8 s/v	C	No	17.1 s/v	B
		PM	35.7 s/v	D	**70.5 s/v**	**E**	**74.4 s/v**	**E**	**Yes**	29.6 s/v	C
24.	Beach Boulevard at McFadden Avenue	AM	39.6 s/v	D	**71.7 s/v**	**E**	**73.2 s/v**	**E**	**Yes**	49.5 s/v	D
		PM	40.0 s/v	D	**74.8 s/v**	**E**	**76.2 s/v**	**E**	**Yes**	53.8 s/v	D
25.	Beach Boulevard at Center Avenue	AM	10.7 s/v	B	13.0 s/v	B	13.1 s/v	B	No	---	---
		PM	21.9 s/v	C	36.2 s/v	D	36.2 s/v	D	No	---	---
26.	Beach Boulevard at Edinger Avenue	AM	35.6 s/v	D	52.4 s/v	D	52.8 s/v	D	No	43.7 s/v	D
		PM	45.5 s/v	D	**95.1 s/v**	**F**	**97.6 s/v**	**F**	**Yes**	78.1 s/v	E

Notes:

- s/v = seconds per vehicle

10.0 RECOMMENDED IMPROVEMENTS

For those intersections where projected Project traffic volumes are expected to result in unacceptable operating conditions, this report recommends (identifies) improvement measures that change the intersection geometry to increase capacity. These capacity improvements involve roadway widening and/or re-striping to reconfigure (add lanes) to specific approaches of a key intersection. The identified improvements are expected to:

- mitigate the impact of existing traffic, Project traffic and future non-project (ambient traffic growth and cumulative project) traffic and
- improve Levels of Service to an acceptable range and/or to better than pre-project conditions.

10.1 Existing Plus Project Traffic Conditions

The results of the intersection capacity analysis presented previously in *Table 8-1* show that the proposed Project will significantly impact two of the twenty six (26) key study intersections under the "Existing Plus Project" traffic scenario. The following improvements listed below have been identified to mitigate the existing plus project impacts at the intersections of Goldenwest Street/Driveway No. 11 and Driveway No. 4/Edinger Avenue.

- Goldenwest Street at Driveway No. 11: Restrict westbound left-turns out of the project site during the AM peak period (7:00 AM – 9:00 AM) and PM peak period (4:00 PM – 6:00 PM)

- Driveway No. 4 at Edinger Avenue: Restrict southbound left-turns out of the project site during the AM peak period (7:00 AM – 9:00 AM) and PM peak period (4:00 PM – 6:00 PM).

Figure 10-1 illustrates the recommended existing plus project improvements at the two impacted key study intersections.

10.2 Year 2024 Plus Project Traffic Conditions

The results of the intersection capacity analysis presented previously in *Table 8-2* show that the proposed Project will significantly impact nine of the twenty six (26) key study intersections under the "Year 2024 Plus Project" traffic scenario. The following improvements listed below have been identified to mitigate the Year 2024 plus project impacts at the intersections of Goldenwest Street/Bolsa Avenue, Goldenwest Street/McFadden Avenue, Goldenwest Street/Driveway No. 11, Goldenwest Street/Edinger Avenue, Driveway No. 4/Edinger Avenue, Vermont Street-Gothard Street/McFadden Avenue, Gothard Street/Driveway No. 2-Center Avenue, Gothard Street/Edinger Avenue and the I-405 SB Ramps/Center Avenue. Per City of Huntington Beach requirements, the proposed Project can be expected to pay a proportional "fair-share" of the improvement costs of the impacted intersections to mitigate the project's traffic impacts.

- Goldenwest Street at Bolsa Avenue: Widen and/or restripe Goldenwest Street to provide a second southbound left-turn lane. Modify the existing traffic signal.

- Goldenwest Street at McFadden Avenue: Widen and/or restripe McFadden Avenue to formalize the existing westbound defacto right-turn lane. Modify the existing traffic signal and install a

westbound right-turn overlap phase. Implementation of the westbound right-turn overlap phase will require the installation of a no u-turn sign for southbound left-turning vehicles.

- Goldenwest Street at Driveway No. 11: Restrict westbound left-turns out of the project site during the AM peak period (7:00 AM – 9:00 AM) and PM peak period (4:00 PM – 6:00 PM)

- Goldenwest Street at Edinger Avenue: Widen and/or restripe Edinger Avenue to provide an exclusive westbound right-turn lane. Modify the existing traffic signal.

- Driveway No. 4 at Edinger Avenue: Restrict southbound left-turns out of the project site during the AM peak period (7:00 AM – 9:00 AM) and PM peak period (4:00 PM – 6:00 PM).

- Vermont Street/Gothard Street at McFadden Avenue: Modify the existing traffic signal and install a northbound right-turn overlap phase.

- Gothard Street at Driveway No. 2/Center Avenue: Restripe the westbound approach to provide dual left-turn lanes and a shared through/right-turn lane. Modify the existing traffic signal to provide protected left-turn phasing in the eastbound and westbound directions.

- Gothard Street at Edinger Avenue: Widen and/or restripe Edinger Avenue to provide an exclusive westbound right-turn lane. Modify the existing traffic signal.

- I-405 SB Ramps at Center Avenue: Modify the existing traffic signal and install a westbound right-turn overlap phase.

Figure 10-2 illustrates the recommended Year 2024 plus project improvements at the nine impacted key study intersections.

10.3 Recommended Improvements – Caltrans

10.3.1 *Existing Plus Project Traffic Conditions – Caltrans*

The results of the Caltrans intersection capacity analysis presented previously in *Table 9-2* show that the proposed Project will not significantly impact any of the five (5) state-controlled study intersections under the "Existing Plus Project" traffic scenario. Given that there are no significant project impacts, no improvements are required under this traffic scenario.

10.3.2 *Year 2024 Plus Project Traffic Conditions – Caltrans*

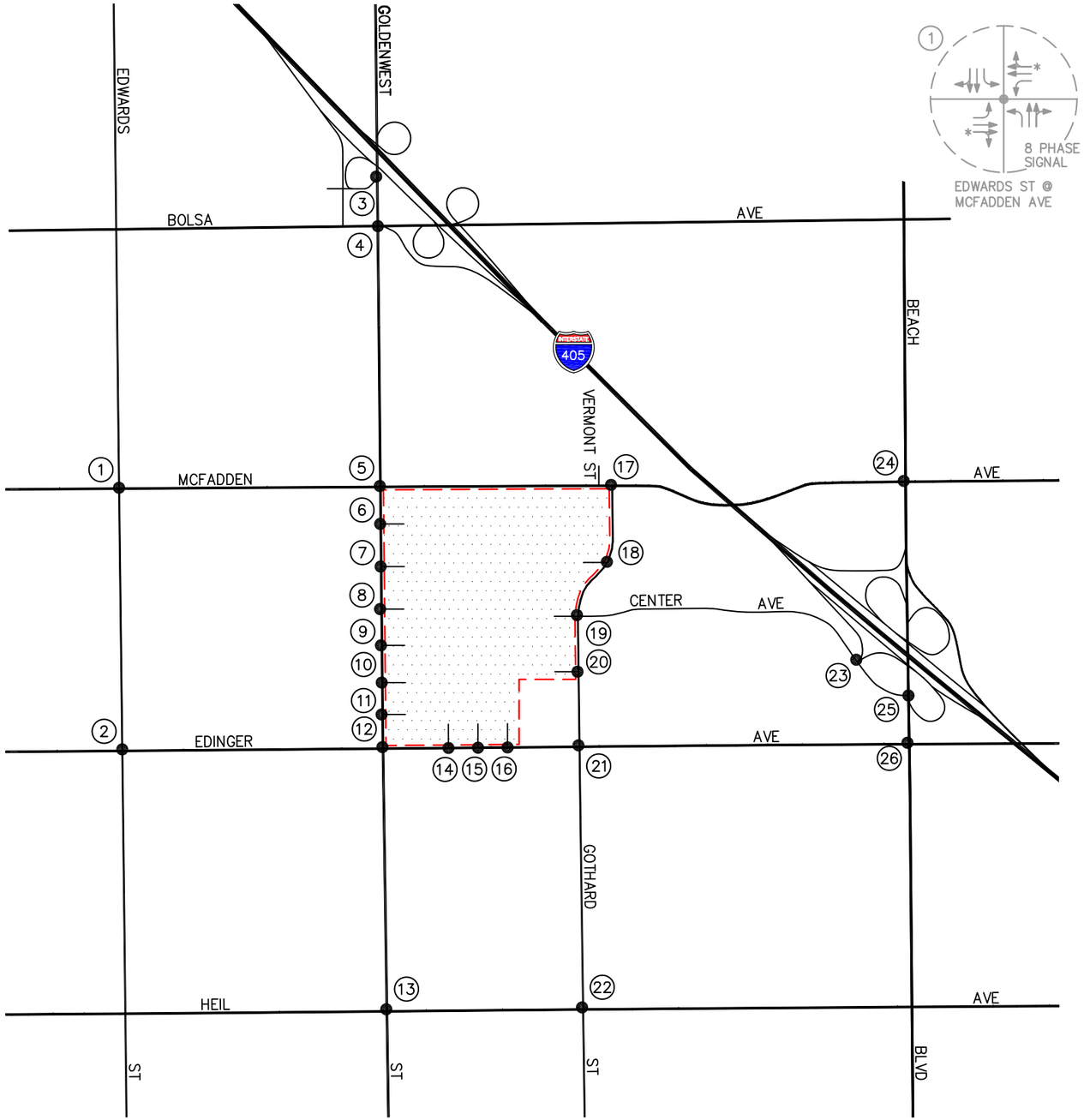
The results of the Caltrans intersection capacity analysis presented previously in *Table 9-3* show that the proposed Project will significantly impact three of the five (5) state-controlled study intersections under the "Year 2024 Plus Project" traffic scenario. The following improvements listed below have been identified to mitigate the Year 2024 plus project Caltrans impacts at the state-controlled study intersections of the I-405 SB Ramps/Center Avenue, Beach Boulevard/McFadden Avenue and Beach Boulevard/Edinger Avenue. Per Caltrans requirements, the proposed Project can be expected to pay a proportional "fair-share" of the improvement costs of the impacted intersections to mitigate the project's traffic impacts.

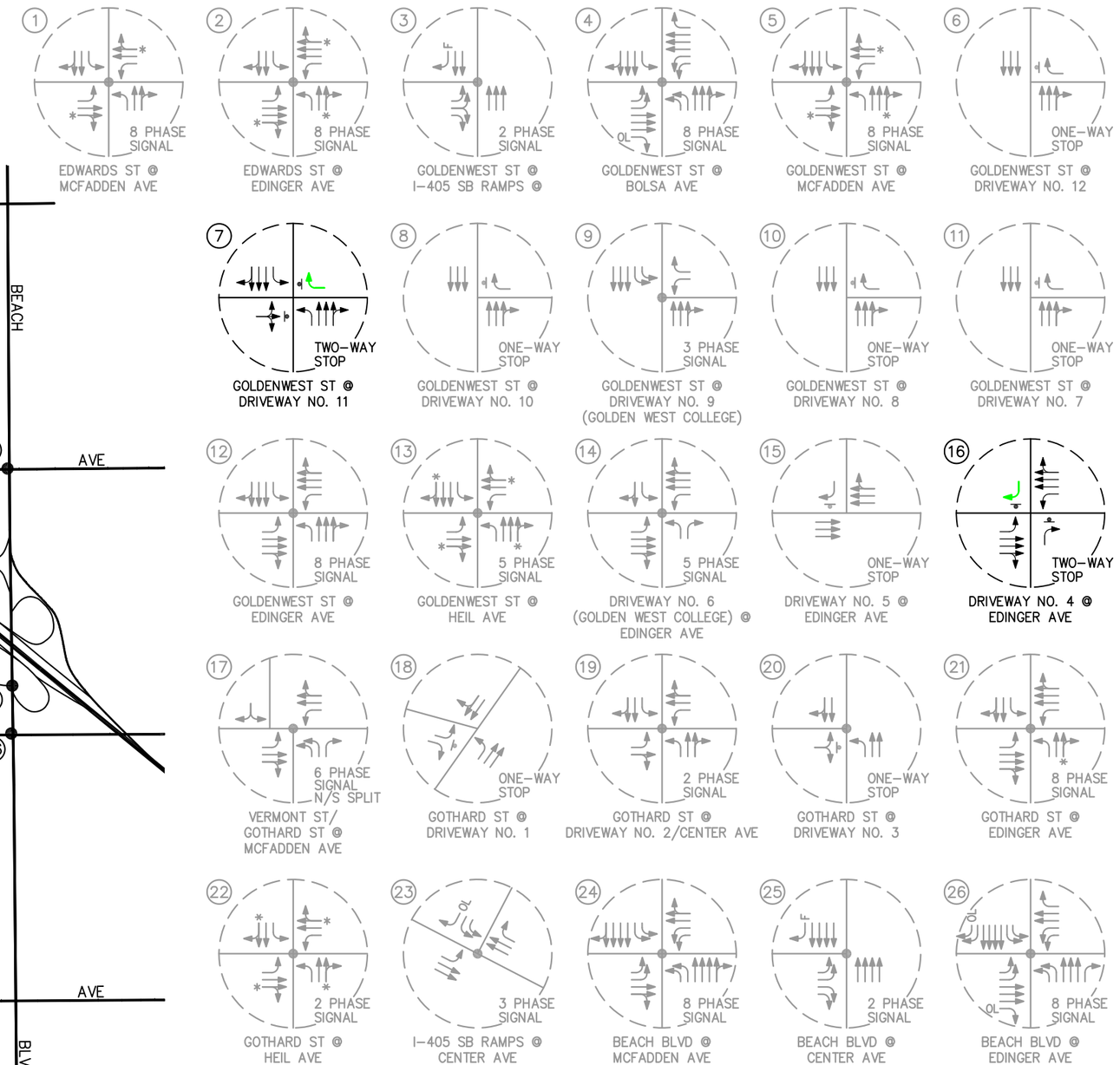
- I-405 SB Ramps at Center Avenue: Modify the existing traffic signal and install a westbound right-turn overlap phase.

- Beach Boulevard at McFadden Avenue: Widen and/or restripe Beach Boulevard to provide an exclusive northbound right-turn lane and an exclusive southbound right-turn lane. Modify the existing traffic signal.

- Beach Boulevard at Edinger Avenue: Widen and/or restripe Beach Boulevard to provide a 4th northbound through lane. Modify the existing traffic signal.

Figure 10-3 illustrates the recommended Caltrans Year 2024 plus project improvements at the three impacted state-controlled key study intersections.





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LINSCOTT LAW & GREENSPAN engineers

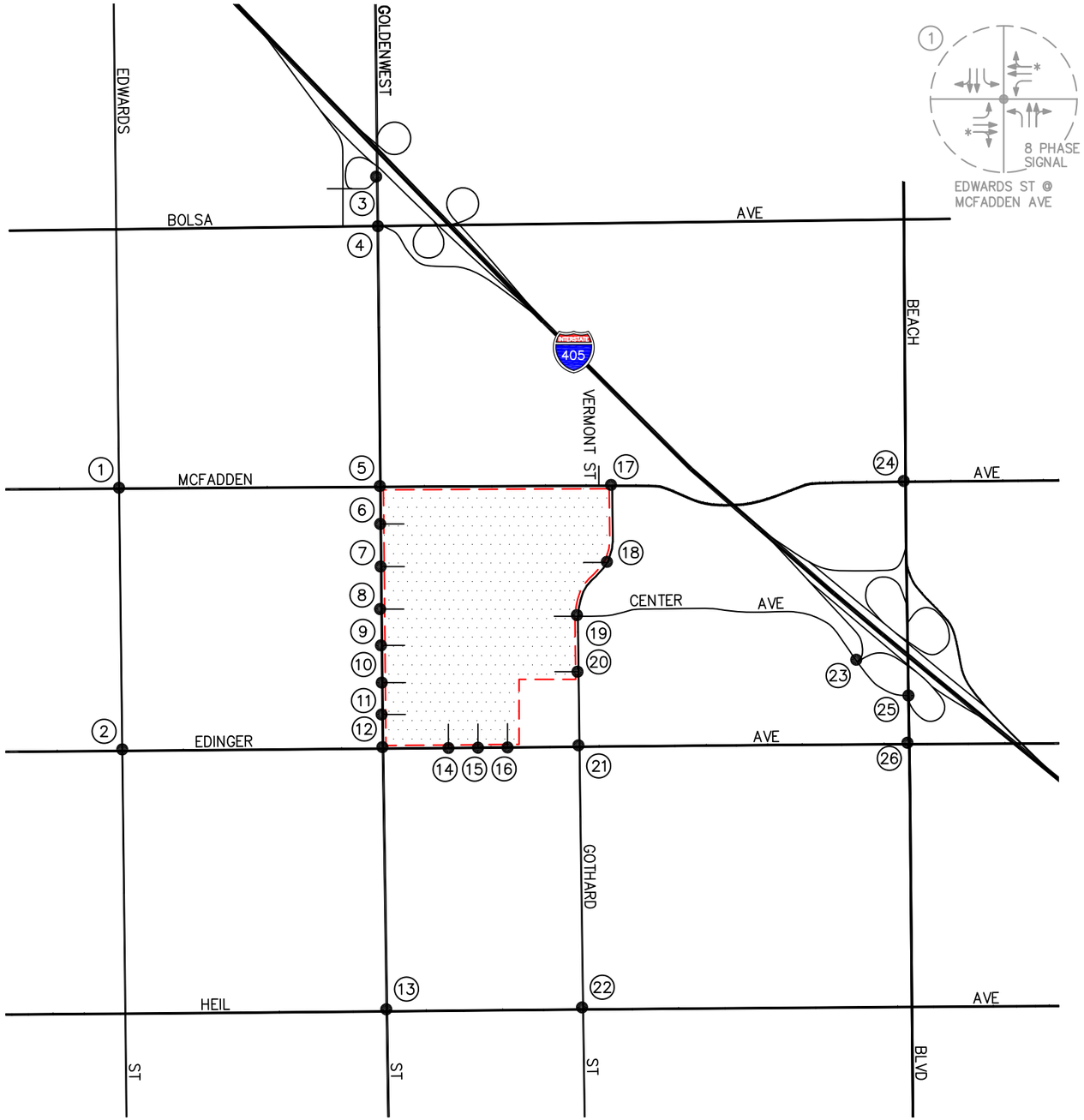
N NO SCALE

KEY

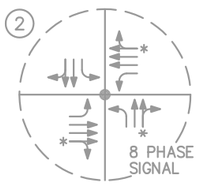
(#) = STUDY INTERSECTION
= APPROACH LANE ASSIGNMENT
= RECOMMENDED EXISTING PLUS PROJECT IMPROVEMENTS
* = DEFACTO RIGHT-TURN LANE
● = TRAFFIC SIGNAL, = STOP SIGN
F = FREE-RIGHT
OL = OVERLAP
= PROJECT SITE

FIGURE 10-1

RECOMMENDED EXISTING PLUS PROJECT IMPROVEMENTS
GOLDEN WEST COLLEGE VISION 2020 FACILITIES MASTER PLAN, HUNTINGTON BEACH



EDWARDS ST @ MCFADDEN AVE



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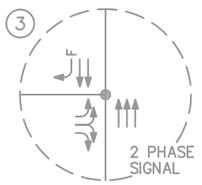
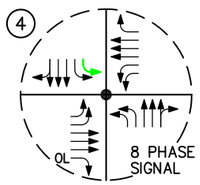
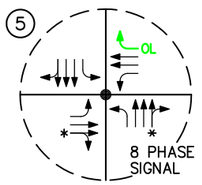


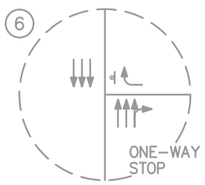
GOLDENWEST ST @ I-405 SB RAMPS @



GOLDENWEST ST @ BOLSA AVE



GOLDENWEST ST @ MCFADDEN AVE



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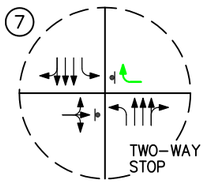

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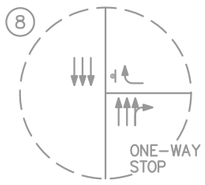

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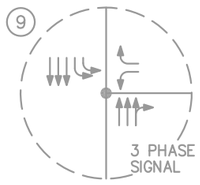

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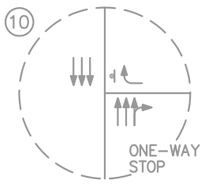

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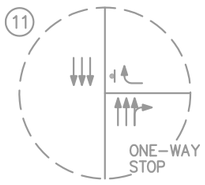

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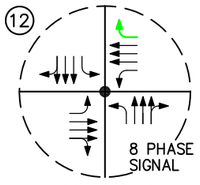
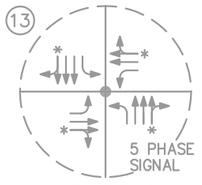
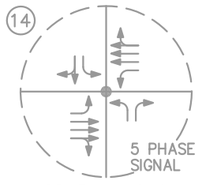


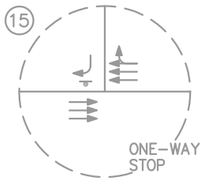
GOLDENWEST ST @ EDINGER AVE



GOLDENWEST ST @ HEIL AVE



DRIVEWAY NO. 6 (GOLDEN WEST COLLEGE) @ EDINGER AVE



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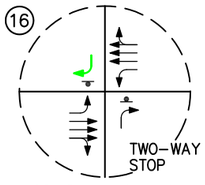

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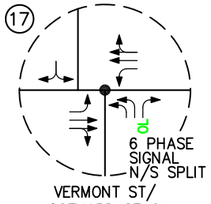
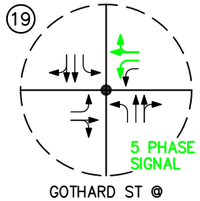


VERMONT ST/ GOTHARD ST @ MCFADDEN AVE



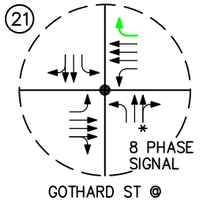
GOTHARD ST @ DRIVEWAY NO. 1



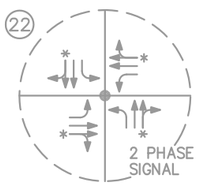
GOTHARD ST @ DRIVEWAY NO. 2/CENTER AVE



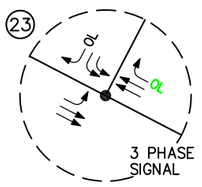
GOTHARD ST @ DRIVEWAY NO. 3



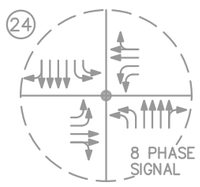
GOTHARD ST @ EDINGER AVE



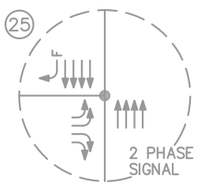
GOTHARD ST @ HEIL AVE



I-405 SB RAMPS @ CENTER AVE



BEACH BLVD @ MCFADDEN AVE



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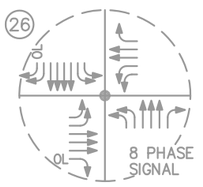

BEACH BLVD @ EDINGER AVE

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LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

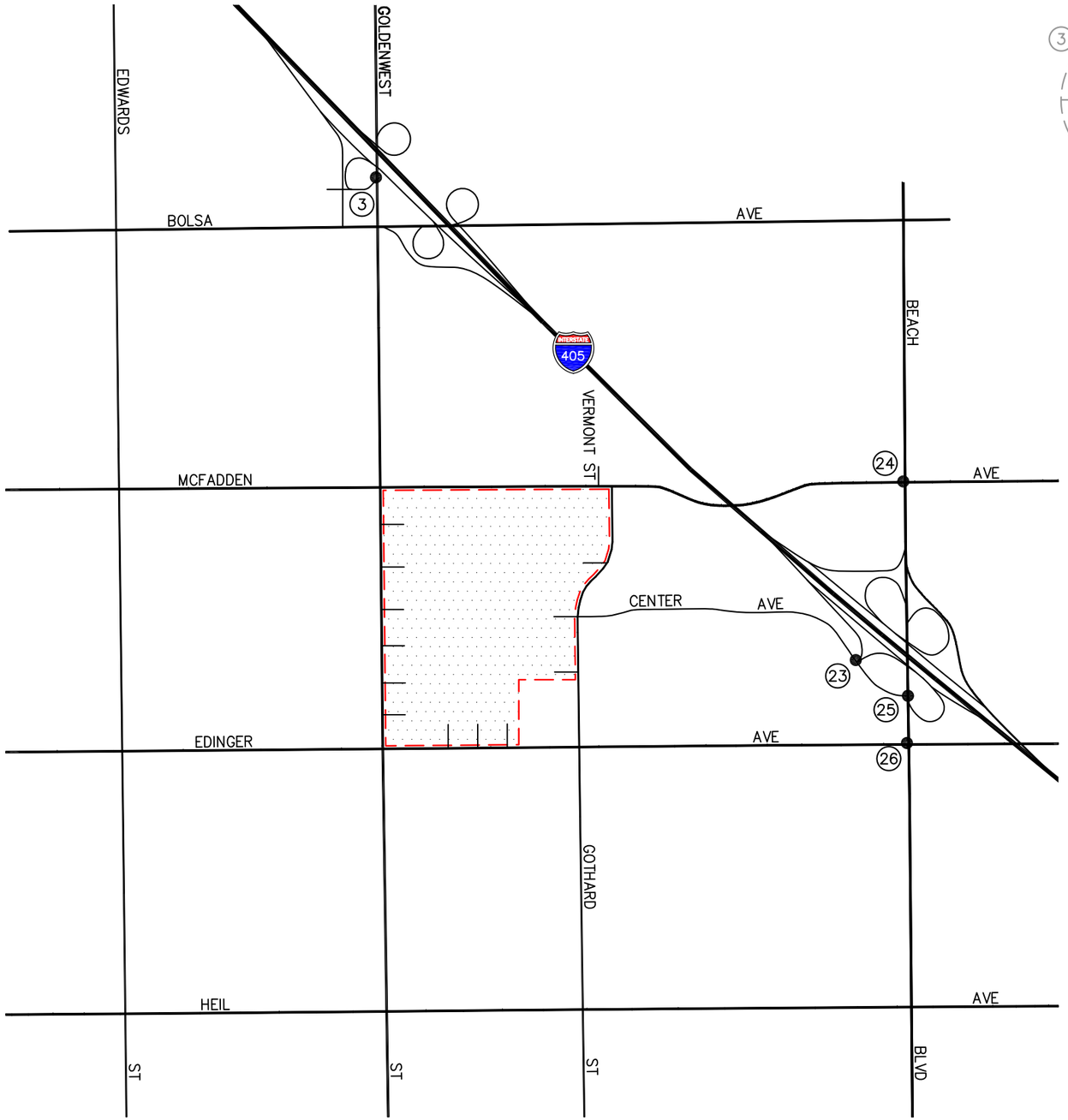
KEY

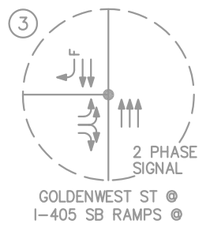
(#) = STUDY INTERSECTION
= APPROACH LANE ASSIGNMENT
= RECOMMENDED YEAR 2024 PLUS PROJECT IMPROVEMENTS
* = DEFACTO RIGHT-TURN LANE
● = TRAFFIC SIGNAL, ⊤ = STOP SIGN
F = FREE-RIGHT
OL = OVERLAP
= PROJECT SITE

FIGURE 10-2

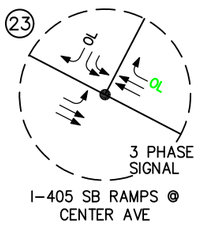
RECOMMENDED YEAR 2024 PLUS PROJECT IMPROVEMENTS

GOLDEN WEST COLLEGE VISION 2020 FACILITIES MASTER PLAN, HUNTINGTON BEACH

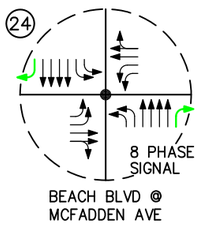




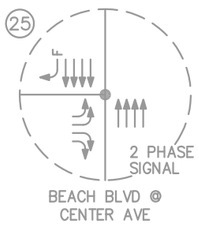
GOLDENWEST ST @
I-405 SB RAMPS @



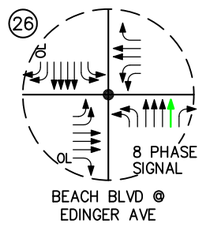
I-405 SB RAMPS @
CENTER AVE



BEACH BLVD @
MCFADDEN AVE



BEACH BLVD @
CENTER AVE



BEACH BLVD @
EDINGER AVE

n:\3300\2133396 - coast community college district, orange county\3396-2 golden west college\dwg\3396-2 f10-3.dwg LDP 10:00:32 12-12-2014 aguilar

LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

KEY

(#) = STUDY INTERSECTION
= APPROACH LANE ASSIGNMENT
= RECOMMENDED YEAR 2024 PLUS PROJECT IMPROVEMENTS - CALTRANS
● = TRAFFIC SIGNAL, ⏚ = STOP SIGN
F = FREE-RIGHT
OL = OVERLAP
= PROJECT SITE

FIGURE 10-3

RECOMMENDED YEAR 2024 PLUS PROJECT IMPROVEMENTS - CALTRANS

GOLDEN WEST COLLEGE VISION 2020 FACILITIES MASTER PLAN, HUNTINGTON BEACH

11.0 SUMMARY OF FINDINGS AND CONCLUSIONS

- ***Project Description*** – The approximately 109-acre project site is bounded by McFadden Avenue to the north, Gothard Street to the east, Edinger Avenue to the south and Goldenwest Street to the west in the City of Huntington Beach, California. The proposed Project will consist of the construction of new campus facilities and the renovation of existing campus facilities to meet the District's instructional needs and to accommodate growth in the student body over the planning horizon and beyond for in-district students and out-of-district students. In addition to the new and/or renovated instructional space, the proposed Project will also consist of the construction of the Boys and Girls Club after school building and the construction of the Boys and Girls Club gymnasium facilities.

  In order to facilitate the development of trip generation forecasts for the proposed Project, the aforementioned project description has been divided amongst two categories. The two categories consist of development related to 1) student growth and 2) the Boys and Girls Club after school building and gymnasium facilities project. All project components are expected to be completed by the Year 2024. The following describes the two categories in detail.

  - Student Growth: Golden West College has a current student enrollment of 12,746 students. As stated above, the renovation of existing campus facilities and the construction of new campus facilities are required to meet the District's instructional needs and to accommodate growth in the student body for in-district students and out-of-district students. At completion of the Master Plan, Golden West College is projected to accommodate a future student enrollment of 15,391 students, resulting in a net increase of 2,645 students.

  - Boys and Girls Club After School Building and Gymnasium Facilities: The Boys and Girls Club after school building and gymnasium facilities project component will be generally located west of Gothard Street and south of the athletic fields (i.e. proposed campus land uses #42 and #50). The Boys and Girls Club after school building will consist of an approximately 14,990 square foot (SF) facility for up to 225 students and the Boys and Girls Club gymnasium facilities will total 9,794 SF. It should be noted that youth leagues may run 2-3 days per week between 6:00 PM and 8:00 PM within the gymnasium. As provided by Boys and Girls Club administration staff, a total of two games per evening may be played and each team would have a maximum of 8 youth members. In order to provide a conservative analysis, the possible use of the gymnasium by the youth leagues is assumed in this traffic impact analysis report.

  Vehicular access to the campus would continue to be provided from Goldenwest Street, Edinger Avenue and Gothard Street. The vehicular entries from Goldenwest Street, Edinger Avenue and Gothard Street would be enhanced with the addition of marked pedestrian drop-off zones

- ***Study Scope*** – The following twenty six (26) key study intersections were selected for detailed peak hour level of service analyses under Existing Traffic Conditions, Existing Plus Project Traffic Conditions, Year 2024 Cumulative Traffic Conditions and Year 2024 Cumulative plus Project Traffic Conditions.

Key Study Intersections

1. Edwards Street at McFadden Ave (HB)
2. Edwards Street at Edinger Avenue (HB)
3. Goldenwest Street at I-405 SB Ramps (WM)
4. Goldenwest Street at Bolsa Avenue (HB)
5. Goldenwest Street at McFadden Avenue (HB)
6. Goldenwest Street at Driveway No. 12 (HB)
7. Goldenwest Street at Driveway No. 11 (HB)
8. Goldenwest Street at Driveway No. 10 (HB)
9. Goldenwest Street at Driveway No. 9 (HB)
10. Goldenwest Street at Driveway No. 8 (HB)
11. Goldenwest Street at Driveway No. 7 (HB)
12. Goldenwest Street at Edinger Avenue (HB)
13. Goldenwest Street at Heil Avenue (HB)
14. Driveway No. 6 at Edinger Avenue (HB)
15. Driveway No. 5 at Edinger Avenue (HB)
16. Driveway No. 4 at Edinger Avenue (HB)
17. Vermont St/Gothard St at McFadden Ave (HB)
18. Gothard Street at Driveway No. 1 (HB)
19. Gothard St at Driveway No. 2/Center Ave (HB)
20. Gothard Street at Driveway No. 3 (HB)
21. Gothard Street at Edinger Avenue (HB)
22. Gothard Street at Heil Avenue (HB)
23. I-405 SB Ramps at Center Avenue (HB)
24. Beach Boulevard at McFadden Avenue (WM)
25. Beach Boulevard at Center Avenue (HB)
26. Beach Boulevard at Edinger Avenue (HB)[16]

- ***Existing Traffic Conditions*** – Two (2) of the twenty six (26) key study intersections currently operate at an unacceptable LOS during the AM and/or PM peak hours. The remaining twenty four (24) key study intersections currently operate at an acceptable level of service during the AM and PM peak hours. The intersections operating at an adverse level of service are:

	AM Peak Hour		PM Peak Hour	
Key Intersection	ICU/HCM	LOS	ICU/HCM	LOS
7. Goldenwest Street at Driveway No. 11	---	---	222.4 s/v	F
16. Driveway No. 4 at Edinger Avenue	35.3 s/v	E	102.9 s/v	F

- ***Project Trip Generation*** – The student growth component of the proposed project (i.e. net increase of 2,645 students) is forecast to generate 3,018 daily trips, with 233 trips forecast during the AM peak hour and 285 trips forecast during the PM peak hour. Review of the middle portion of *Table 5-2* shows that the Boys and Girls Club afterschool building component of the proposed project is forecast to generate 258 daily trips, with 2 trips forecast during the AM peak hour and 190 trips forecast during the PM peak hour. Review of the lower portion of *Table 5-2* shows that the Boys and Girls Club gymnasium facilities component of the proposed project is forecast to generate 399 daily trips, with 20 trips forecast during the AM peak hour and 61 trips forecast during the PM peak hour. Overall, as shown at the bottom of *Table 5-2,* the proposed Project is forecast to generate approximately 3,675 daily trips, with 255 trips (200 inbound, 55 outbound) produced in the AM peak hour and 536 trips (270 inbound, 266 outbound) produced in the PM peak hour on a typical weekday.

- ***Cumulative Projects Traffic Characteristics –*** The fifteen (15) cumulative projects are forecast to generate a combined total of 22,794 daily trips, with 1,327 trips (416 inbound and 911 outbound) forecast during the AM peak hour and 1,904 trips (1,124 inbound and 780 outbound) forecast during the PM peak hour.

[16] Orange County Congestion Management Program (CMP) intersection.

- ***Existing Plus Project Traffic Conditions*** – The proposed Project will significantly impact two (2) of the twenty six (26) key study intersections, when compared to the LOS standards and significant impact criteria specified in this report. The remaining twenty four (24) key study intersections currently operate and are forecast to continue to operate at an acceptable service level during the AM and PM peak hours with the addition of Project generated traffic to existing traffic. The intersections operating at an adverse level of service under existing plus project traffic conditions are:

	AM Peak Hour		PM Peak Hour	
Key Intersection	ICU/HCM	LOS	ICU/HCM	LOS
7. Goldenwest Street at Driveway No. 11	41.4 s/v	E	620.8 s/v	F
16. Driveway No. 4 at Edinger Avenue	39.9 s/v	E	143.9 s/v	F

The implementation of improvements at the impacted intersections of Goldenwest Street/Driveway No. 11 and Driveway No. 4/Edinger Avenue completely offsets the impact of project traffic. The impacted key study intersections are forecast to operate at an acceptable LOS during the AM and PM peak hours with implementation of improvements.

- ***Year 2024 Cumulative Plus Project Traffic Conditions*** – The proposed Project will significantly impact nine (9) of the twenty six (26) key study intersections, when compared to the LOS standards and significant impact criteria specified in this report. Although the intersection of Beach Boulevard/McFadden Avenue is forecast to operate at unacceptable LOS E during the AM and PM peak hours with the addition of project traffic, the proposed Project is expected to add less than 0.010 to the ICU value. The remaining sixteen (16) key study intersections are forecast to continue to operate at an acceptable service level during the AM and PM peak hours with the addition of Project generated traffic to existing traffic, ambient growth traffic and cumulative projects traffic. The intersections operating at an adverse level of service under Year 2024 cumulative plus project traffic conditions are:

	AM Peak Hour		PM Peak Hour	
Key Intersection	ICU/HCM	LOS	ICU/HCM	LOS
4. Goldenwest Street at Bolsa Avenue	---	---	0.986	E
5. Goldenwest Street at McFadden Avenue	---	---	0.907	E
7. Goldenwest Street at Driveway No. 11	99.3 s/v	F	3094.5 s/v	F
12. Goldenwest Street at Edinger Avenue	---	---	0.923	E
16. Driveway No. 4 at Edinger Avenue	92.5 s/v	F	1056.3 s/v	F
17. Vermont St/Gothard St at McFadden Ave	---	---	0.904	E
19. Gothard Street at Dwy No. 2/Center Ave	---	---	0.929	E
21. Gothard Street at Edinger Avenue	---	---	0.942	E
23. I-405 SB Ramps at Center Avenue	---	---	1.026	F

The implementation of improvements at the impacted intersections completely offsets the impact of the proposed project.

- ***State of California (Caltrans) Methodology*** – The results of the "Existing Plus Project" traffic analysis using the State of California (Caltrans) Methodology indicate that the proposed Project will not significantly impact the five (5) state-controlled study intersections. As there are no significant impacts, no traffic mitigation measures are required or recommended for the two (2) state-controlled study intersections. The five (5) state-controlled study intersections are forecast to continue to operate at acceptable LOS D or better with the addition of Project generated traffic to existing traffic.

  The results of the "Year 2024 Plus Project" traffic analysis using the State of California (Caltrans) Methodology indicate that the proposed Project will significantly impact three of the five (5) state-controlled study intersections, when compared to the LOS standards specified in this report. The remaining two state-controlled study intersections are forecast to continue to operate at acceptable LOS D or better with the addition of project generated traffic in the Year 2024. The implementation of improvements at the impacted state-controlled intersections completely offsets the impact of the proposed project. The impacted state-controlled key study intersections are forecast to operate at an acceptable LOS during the AM and PM peak hours with implementation of improvements.

- ***Recommended Existing Plus Project Improvements –*** The following improvements listed below have been identified to mitigate the existing plus project impacts at the intersections of Goldenwest Street/Driveway No. 11 and Driveway No. 4/Edinger Avenue.

  - Goldenwest Street at Driveway No. 11: Restrict westbound left-turns out of the project site during the AM peak period (7:00 AM – 9:00 AM) and PM peak period (4:00 PM – 6:00 PM)

  - Driveway No. 4 at Edinger Avenue: Restrict southbound left-turns out of the project site during the AM peak period (7:00 AM – 9:00 AM) and PM peak period (4:00 PM – 6:00 PM).

- ***Recommended Year 2024 Plus Project Improvements –*** The following improvements listed below have been identified to mitigate the Year 2024 plus project impacts at the intersections of Goldenwest Street/Bolsa Avenue, Goldenwest Street/McFadden Avenue, Goldenwest Street/Driveway No. 11, Goldenwest Street/Edinger Avenue, Driveway No. 4/Edinger Avenue, Vermont Street-Gothard Street/McFadden Avenue, Gothard Street/Driveway No. 2-Center Avenue, Gothard Street/Edinger Avenue and the I-405 SB Ramps/Center Avenue. Per City of Huntington Beach requirements, the proposed Project can be expected to pay a proportional "fair-share" of the improvement costs of the impacted intersections to mitigate the project's traffic impacts.

  - Goldenwest Street at Bolsa Avenue: Widen and/or restripe Goldenwest Street to provide a second southbound left-turn lane. Modify the existing traffic signal.

  - Goldenwest Street at McFadden Avenue: Widen and/or restripe McFadden Avenue to formalize the existing westbound defacto right-turn lane. Modify the existing traffic signal and install a westbound right-turn overlap phase. Implementation of the westbound

right-turn overlap phase will require the installation of a no u-turn sign for southbound left-turning vehicles.

- Goldenwest Street at Driveway No. 11: Restrict westbound left-turns out of the project site during the AM peak period (7:00 AM – 9:00 AM) and PM peak period (4:00 PM – 6:00 PM)

- Goldenwest Street at Edinger Avenue: Widen and/or restripe Edinger Avenue to provide an exclusive westbound right-turn lane. Modify the existing traffic signal.

- Driveway No. 4 at Edinger Avenue: Restrict southbound left-turns out of the project site during the AM peak period (7:00 AM – 9:00 AM) and PM peak period (4:00 PM – 6:00 PM).

- Vermont Street/Gothard Street at McFadden Avenue: Modify the existing traffic signal and install a northbound right-turn overlap phase.

- Gothard Street at Driveway No. 2/Center Avenue: Restripe the westbound approach to provide dual left-turn lanes and a shared through/right-turn lane. Modify the existing traffic signal to provide protected left-turn phasing in the eastbound and westbound directions.

- Gothard Street at Edinger Avenue: Widen and/or restripe Edinger Avenue to provide an exclusive westbound right-turn lane. Modify the existing traffic signal.

- I-405 SB Ramps at Center Avenue: Modify the existing traffic signal and install a westbound right-turn overlap phase.

- ***Recommended Existing Plus Project Improvements (Caltrans) –*** The results of the Caltrans intersection capacity analysis presented previously in *Table 9-2* show that the proposed Project will not significantly impact any of the five (5) state-controlled study intersections under the "Existing Plus Project" traffic scenario. Given that there are no significant project impacts, no improvements are required under this traffic scenario.

- ***Recommended Year 2024 Plus Project Improvements (Caltrans) –*** The results of the Caltrans intersection capacity analysis presented previously in *Table 9-3* show that the proposed Project will significantly impact three of the five (5) state-controlled study intersections under the "Year 2024 Plus Project" traffic scenario. The following improvements listed below have been identified to mitigate the Year 2024 plus project Caltrans impacts at the state-controlled study intersections of the I-405 SB Ramps/Center Avenue, Beach Boulevard/McFadden Avenue and Beach Boulevard/Edinger Avenue. Per Caltrans requirements, the proposed Project can be expected to pay a proportional "fair-share" of the improvement costs of the impacted intersections to mitigate the project's traffic impacts.

  - I-405 SB Ramps at Center Avenue: Modify the existing traffic signal and install a westbound right-turn overlap phase.

- Beach Boulevard at McFadden Avenue: Widen and/or restripe Beach Boulevard to provide an exclusive northbound right-turn lane and an exclusive southbound right-turn lane. Modify the existing traffic signal.

- Beach Boulevard at Edinger Avenue: Widen and/or restripe Beach Boulevard to provide a 4th northbound through lane. Modify the existing traffic signal.

APPENDIX A

EXISTING TRAFFIC COUNT DATA

(1)

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: EDWARDS STREET
E-W Direction: MCFADDEN AVENUE

File Name : H1311097
Site Code : 00005057
Start Date : 11/20/2013
Page No : 1

Groups Printed- Turning Movements

	EDWARDS STREET Southbound			MCFADDEN AVENUE Westbound			EDWARDS STREET Northbound			MCFADDEN AVENUE Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
07:00 AM	31	86	13	9	118	9	19	84	17	8	62	12	468
07:15 AM	11	94	13	12	67	5	12	98	16	10	76	9	423
07:30 AM	10	110	22	18	99	9	7	100	22	15	67	10	489
07:45 AM	13	175	45	26	114	18	16	106	33	32	98	12	688
Total	65	465	93	65	398	41	54	388	88	65	303	43	2068
08:00 AM	25	183	65	29	133	19	11	127	45	47	146	30	860
08:15 AM	24	144	39	20	98	10	21	131	32	21	142	24	706
08:30 AM	30	102	37	9	118	11	8	133	16	25	100	17	606
08:45 AM	22	118	31	8	87	12	9	131	21	18	100	17	574
Total	101	547	172	66	436	52	49	522	114	111	488	88	2746
*** BREAK ***													
04:00 PM	17	129	28	31	91	11	7	113	18	27	130	37	639
04:15 PM	24	137	18	20	96	21	10	112	16	24	161	25	664
04:30 PM	12	134	22	28	105	22	10	125	15	36	141	23	673
04:45 PM	17	148	15	26	111	20	12	125	10	35	157	31	707
Total	70	548	83	105	403	74	39	475	59	122	589	116	2683
05:00 PM	21	158	12	24	142	16	25	143	13	20	129	18	721
05:15 PM	17	138	30	36	148	20	12	150	24	47	176	32	830
05:30 PM	14	120	21	20	141	15	12	138	14	37	137	27	696
05:45 PM	23	117	21	24	126	11	12	126	18	24	100	24	626
Total	75	533	84	104	557	62	61	557	69	128	542	101	2873
Grand Total	311	2093	432	340	1794	229	203	1942	330	426	1922	348	10370
Apprch %	11	73.8	15.2	14.4	75.9	9.7	8.2	78.5	13.3	15.8	71.3	12.9	
Total %	3	20.2	4.2	3.3	17.3	2.2	2	18.7	3.2	4.1	18.5	3.4	

Transportation Studies, Inc.
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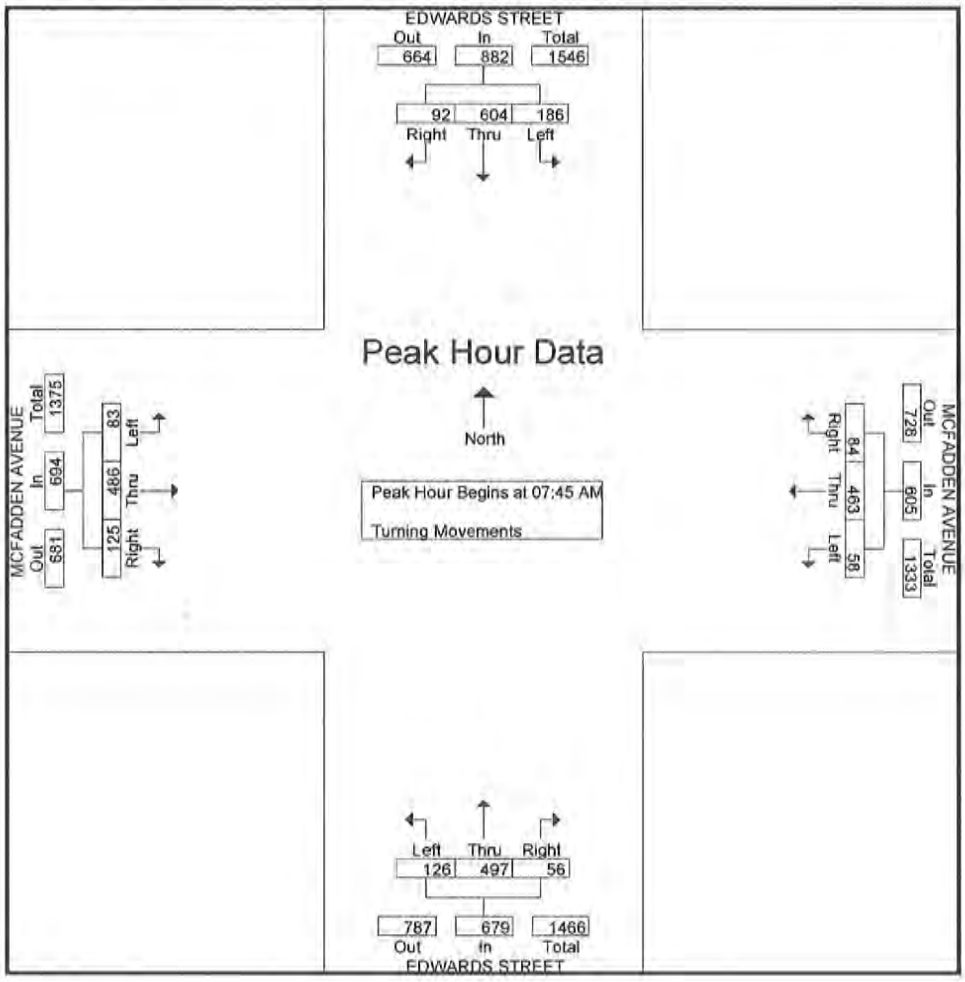
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: EDWARDS STREET
E-W Direction: MCFADDEN AVENUE

File Name : H1311097
Site Code : 00005057
Start Date : 11/20/2013
Page No : 2

	EDWARDS STREET Southbound				MCFADDEN AVENUE Westbound				EDWARDS STREET Northbound				MCFADDEN AVENUE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	13	175	45	233	26	114	18	158	16	106	33	155	32	98	12	142	688
08:00 AM	25	**183**	**65**	**273**	**29**	**133**	**19**	**181**	11	127	**45**	183	**47**	**146**	**30**	**223**	**860**
08:15 AM	24	144	39	207	20	98	10	128	**21**	131	32	**184**	21	142	24	187	706
08:30 AM	**30**	102	37	169	9	118	11	138	8	**133**	16	157	25	100	17	142	606
Total Volume	92	604	186	882	84	463	58	605	56	497	126	679	125	486	83	694	2860
% App. Total	10.4	68.5	21.1		13.9	76.5	9.6		8.2	73.2	18.6		18	70	12		
PHF	.767	.825	.715	.808	.724	.870	.763	.836	.667	.934	.700	.923	.665	.832	.692	.778	.831



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City: HUNTINGTON BEACH
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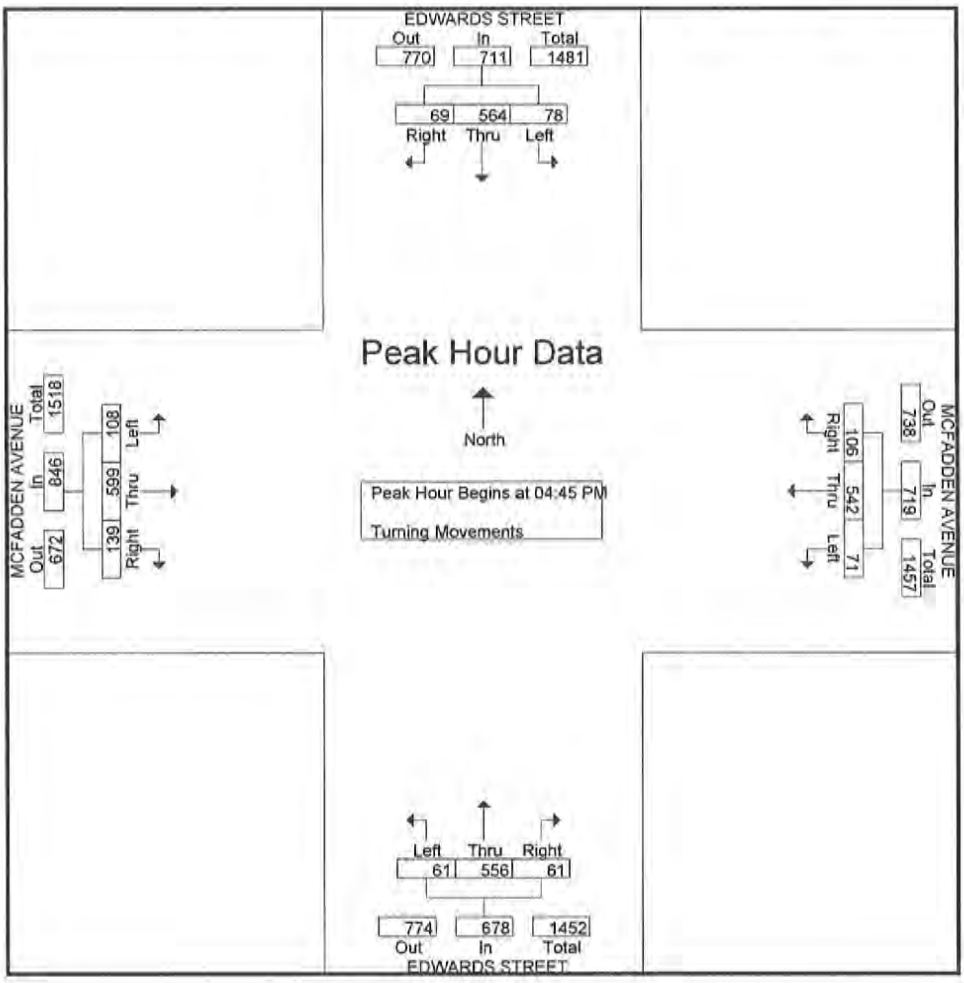
E-W Direction: MCFADDEN AVENUE

File Name : H1311097
Site Code : 00005057
Start Date : 11/20/2013
Page No : 3

	EDWARDS STREET Southbound				MCFADDEN AVENUE Westbound				EDWARDS STREET Northbound				MCFADDEN AVENUE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	17	148	15	180	26	111	**20**	157	12	125	10	147	35	157	31	223	707
05:00 PM	**21**	**158**	12	**191**	24	142	16	182	**25**	143	13	181	20	129	18	167	721
05:15 PM	17	138	**30**	185	**36**	**148**	20	**204**	12	**150**	**24**	**186**	**47**	**176**	**32**	**255**	**830**
05:30 PM	14	120	21	155	20	141	15	176	12	138	14	164	37	137	27	201	696
Total Volume	69	564	78	711	106	542	71	719	61	556	61	678	139	599	108	846	2954
% App. Total	9.7	79.3	11		14.7	75.4	9.9		9	82	9		16.4	70.8	12.8		
PHF	.821	.892	.650	.931	.736	.916	.888	.881	.610	.927	.635	.911	.739	.851	.844	.829	.890



(2)

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA 92780

City: HUNTINGTON BEACH
N-S Direction: EDWARDS STREET
E-W Direction: EDINGER AVENUE

File Name : H1311098
Site Code : 00005163
Start Date : 11/20/2013
Page No : 1

Groups Printed- Turning Movements

	EDWARDS STREET Southbound			EDINGER AVENUE Westbound			EDWARDS STREET Northbound			EDINGER AVENUE Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
07:00 AM	13	61	19	17	105	12	25	67	13	14	170	14	530
07:15 AM	12	67	20	11	75	7	16	119	12	12	159	6	516
07:30 AM	19	91	26	18	109	12	28	96	24	13	206	13	655
07:45 AM	45	170	55	30	182	19	37	127	60	28	269	18	1040
Total	89	389	120	76	471	50	106	409	109	67	804	51	2741
08:00 AM	24	184	47	26	168	24	36	149	49	41	293	25	1066
08:15 AM	6	124	38	19	106	8	56	159	28	22	208	11	785
08:30 AM	7	82	23	20	89	11	29	86	15	20	197	12	591
08:45 AM	11	76	36	16	87	12	28	105	19	15	194	8	607
Total	48	466	144	81	450	55	149	499	111	98	892	56	3049
*** BREAK ***													
04:00 PM	14	119	27	21	178	23	20	92	10	19	182	18	723
04:15 PM	22	118	27	37	181	24	33	121	15	15	172	16	781
04:30 PM	28	126	26	34	205	34	25	107	26	34	193	20	858
04:45 PM	21	144	26	39	183	28	34	109	19	20	209	18	850
Total	85	507	106	131	747	109	112	429	70	88	756	72	3212
05:00 PM	32	109	15	21	264	28	22	98	30	27	182	21	849
05:15 PM	29	119	38	45	256	24	27	162	19	21	180	17	937
05:30 PM	22	136	15	45	226	24	35	105	26	25	179	25	863
05:45 PM	23	119	28	39	228	26	31	127	18	18	180	19	856
Total	106	483	96	150	974	102	115	492	93	91	721	82	3505
Grand Total	328	1845	466	438	2642	316	482	1829	383	344	3173	261	12507
Apprch %	12.4	69.9	17.7	12.9	77.8	9.3	17.9	67.9	14.2	9.1	84	6.9	
Total %	2.6	14.8	3.7	3.5	21.1	2.5	3.9	14.6	3.1	2.8	25.4	2.1	

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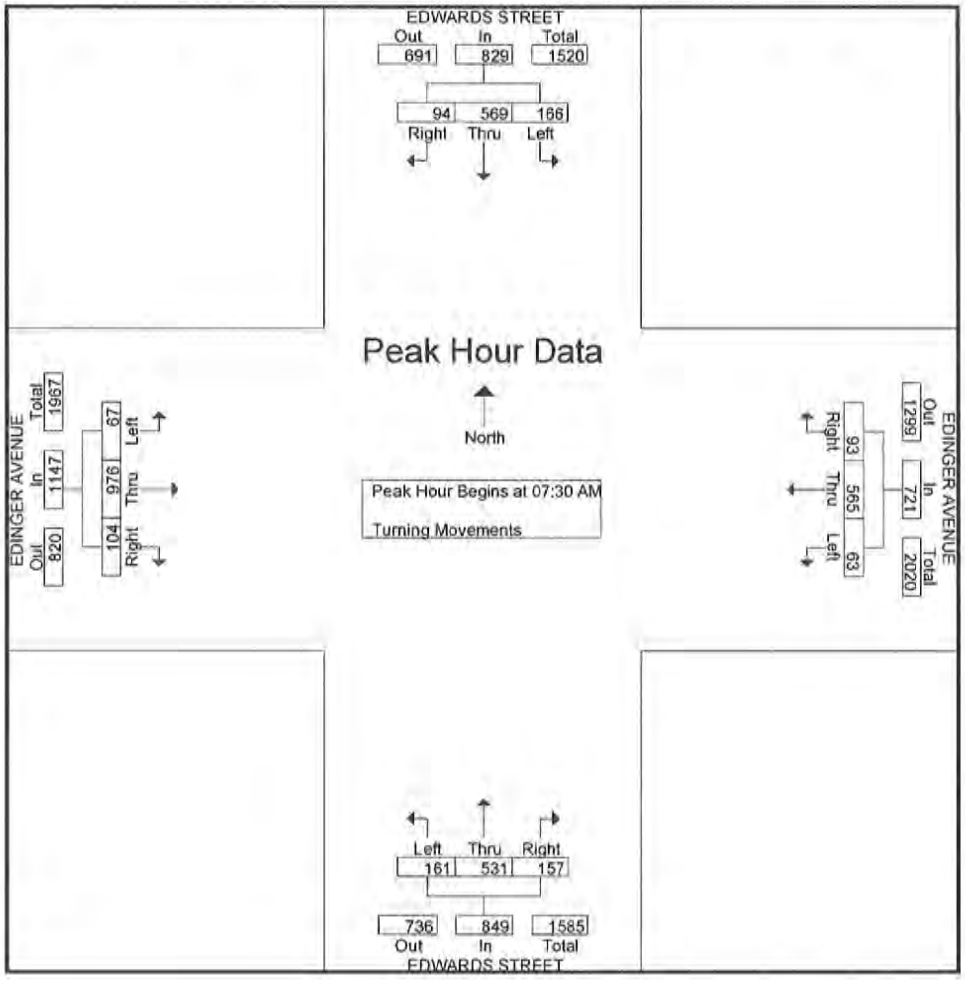
File Name : H1311098
Site Code : 00005163
Start Date : 11/20/2013
Page No : 2

	EDWARDS STREET Southbound				EDINGER AVENUE Westbound				EDWARDS STREET Northbound				EDINGER AVENUE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	19	91	26	136	18	109	12	139	28	96	24	148	13	206	13	232	655
07:45 AM	**45**	170	**55**	**270**	**30**	**182**	19	**231**	37	127	**60**	224	28	269	18	315	1040
08:00 AM	24	**184**	47	255	26	168	**24**	218	36	149	49	234	**41**	**293**	**25**	**359**	**1066**
08:15 AM	6	124	38	168	19	106	8	133	**56**	**159**	28	**243**	22	208	11	241	785
Total Volume	94	569	166	829	93	565	63	721	157	531	161	849	104	976	67	1147	3546
% App. Total	11.3	68.6	20		12.9	78.4	8.7		18.5	62.5	19		9.1	85.1	5.8		
PHF	.522	.773	.755	.768	.775	.776	.656	.780	.701	.835	.671	.873	.634	.833	.670	.799	.832

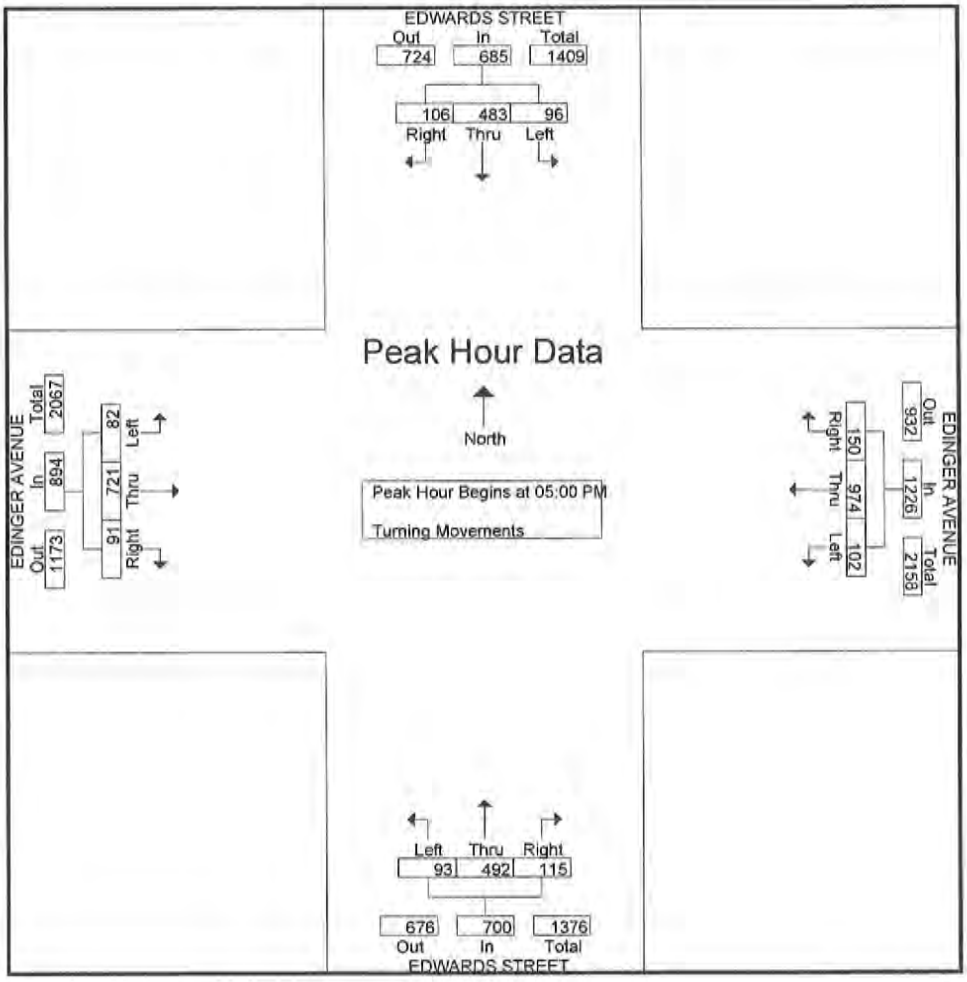


Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: EDWARDS STREET
E-W Direction: EDINGER AVENUE

File Name : H1311098
Site Code : 00005163
Start Date : 11/20/2013
Page No : 3

	EDWARDS STREET Southbound				EDINGER AVENUE Westbound				EDWARDS STREET Northbound				EDINGER AVENUE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**32**	109	15	156	21	**264**	**28**	313	22	98	**30**	150	**27**	**182**	21	**230**	849
05:15 PM	29	119	**38**	**186**	**45**	256	24	**325**	27	**162**	19	**208**	21	180	17	218	**937**
05:30 PM	22	**136**	15	173	45	226	24	295	**35**	105	26	166	25	179	**25**	229	863
05:45 PM	23	119	28	170	39	228	26	293	31	127	18	176	18	180	19	217	856
Total Volume	106	483	96	685	150	974	102	1226	115	492	93	700	91	721	82	894	3505
% App. Total	15.5	70.5	14		12.2	79.4	8.3		16.4	70.3	13.3		10.2	80.6	9.2		
PHF	.828	.888	.632	.921	.833	.922	.911	.943	.821	.759	.775	.841	.843	.990	.820	.972	.935



(3)

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOLDENWEST STREET
E-W Direction: I-405 SB RAMPS

File Name : H1311099
Site Code : 00000000
Start Date : 11/20/2013
Page No : 1

Groups Printed- Turning Movements

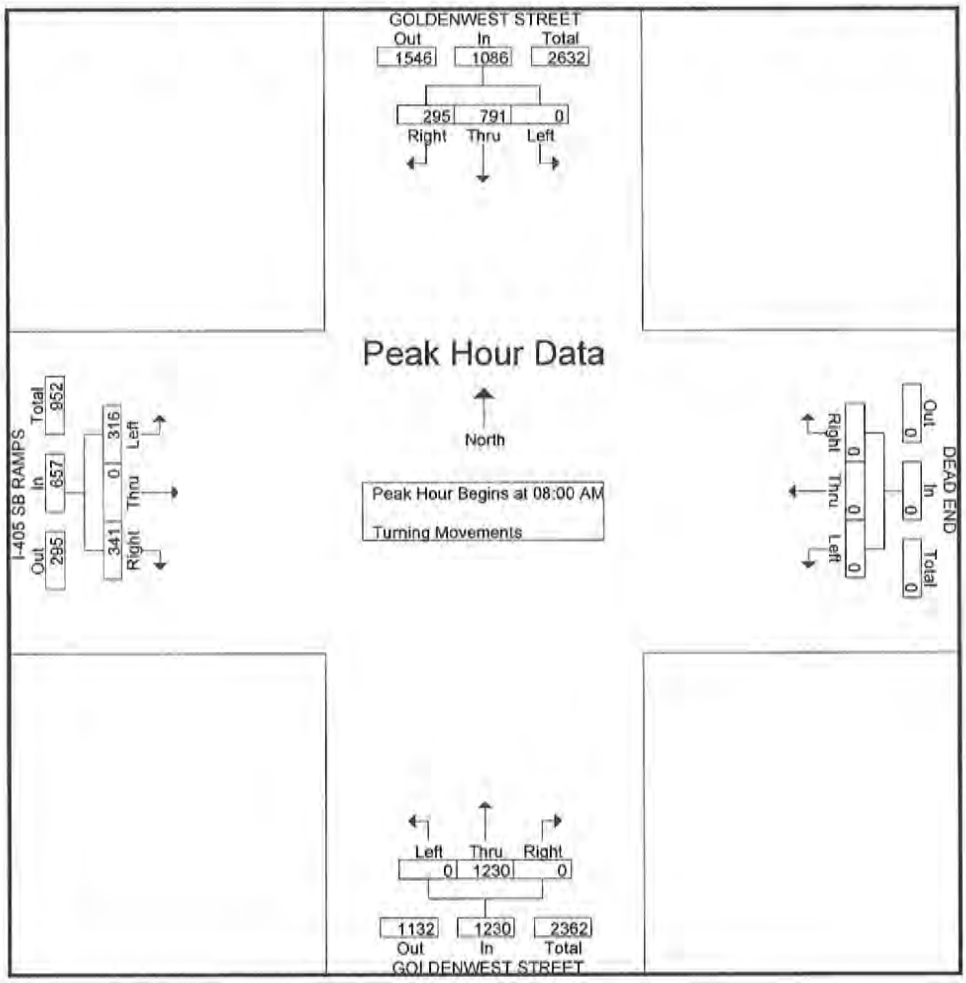
	GOLDENWEST STREET Southbound			DEAD END Westbound			GOLDENWEST STREET Northbound			I-405 SB RAMPS Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
07:00 AM	100	140	0	0	0	0	0	259	0	105	0	56	660
07:15 AM	103	152	0	0	0	0	0	283	0	103	0	52	693
07:30 AM	98	205	0	0	0	0	0	274	0	107	0	76	760
07:45 AM	94	199	0	0	0	0	0	277	0	104	0	63	737
Total	395	696	0	0	0	0	0	1093	0	419	0	247	2850
08:00 AM	77	161	0	0	0	0	0	288	0	77	0	59	662
08:15 AM	75	205	0	0	0	0	0	298	0	87	0	75	740
08:30 AM	69	188	0	0	0	0	0	291	0	81	0	72	701
08:45 AM	74	237	0	0	0	0	0	353	0	96	0	110	870
Total	295	791	0	0	0	0	0	1230	0	341	0	316	2973
*** BREAK ***													
04:00 PM	109	191	0	0	0	0	0	457	0	106	0	52	915
04:15 PM	116	226	0	0	0	0	0	447	0	101	0	67	957
04:30 PM	81	152	0	0	0	0	0	454	0	119	0	63	869
04:45 PM	85	145	0	0	0	0	0	462	0	80	0	55	827
Total	391	714	0	0	0	0	0	1820	0	406	0	237	3568
05:00 PM	96	112	0	0	0	0	0	495	0	81	0	68	852
05:15 PM	126	201	0	0	0	0	0	424	0	97	0	65	913
05:30 PM	123	238	0	0	0	0	0	548	0	133	0	74	1116
05:45 PM	123	236	0	0	0	0	0	484	0	102	0	69	1014
Total	468	787	0	0	0	0	0	1951	0	413	0	276	3895
Grand Total	1549	2988	0	0	0	0	0	6094	0	1579	0	1076	13286
Apprch %	34.1	65.9	0	0	0	0	0	100	0	59.5	0	40.5	
Total %	11.7	22.5	0	0	0	0	0	45.9	0	11.9	0	8.1	

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOLDENWEST STREET
E-W Direction: I-405 SB RAMPS

File Name : H1311099
Site Code : 00000000
Start Date : 11/20/2013
Page No : 2

	GOLDENWEST STREET Southbound				DEAD END Westbound				GOLDENWEST STREET Northbound				I-405 SB RAMPS Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	77	161	0	238	0	0	0	0	0	288	0	288	77	0	59	136	662
08:15 AM	75	205	0	280	0	0	0	0	0	298	0	298	87	0	75	162	740
08:30 AM	69	188	0	257	0	0	0	0	0	291	0	291	81	0	72	153	701
08:45 AM	74	237	0	311	0	0	0	0	0	353	0	353	96	0	110	206	870
Total Volume	295	791	0	1086	0	0	0	0	0	1230	0	1230	341	0	316	657	2973
% App. Total	27.2	72.8	0		0	0	0		0	100	0		51.9	0	48.1		
PHF	.958	.834	.000	.873	.000	.000	.000	.000	.000	.871	.000	.871	.888	.000	.718	.797	.854

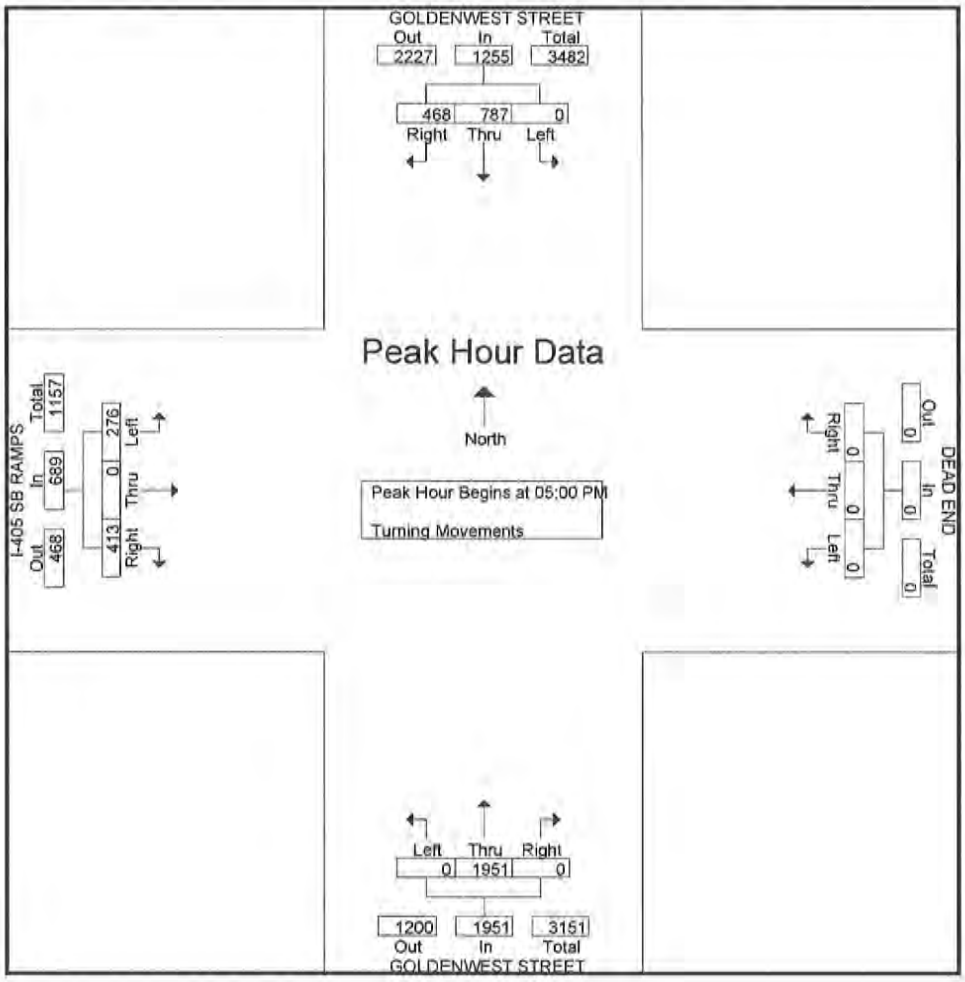


Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOLDENWEST STREET
E-W Direction: I-405 SB RAMPS

File Name : H1311099
Site Code : 00000000
Start Date : 11/20/2013
Page No : 3

	GOLDENWEST STREET Southbound				DEAD END Westbound				GOLDENWEST STREET Northbound				I-405 SB RAMPS Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	96	112	0	208	0	0	0	0	0	495	0	495	81	0	68	149	852
05:15 PM	126	201	0	327	0	0	0	0	0	424	0	424	97	0	65	162	913
05:30 PM	123	238	0	361	0	0	0	0	0	548	0	548	133	0	74	207	1116
05:45 PM	123	236	0	359	0	0	0	0	0	484	0	484	102	0	69	171	1014
Total Volume	468	787	0	1255	0	0	0	0	0	1951	0	1951	413	0	276	689	3895
% App. Total	37.3	62.7	0		0	0	0		0	100	0		59.9	0	40.1		
PHF	.929	.827	.000	.869	.000	.000	.000	.000	.000	.890	.000	.890	.776	.000	.932	.832	.873



(9)

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOLDENWEST STREET
E-W Direction: BOLSA AVENUE

File Name : H1311100
Site Code : 00000553
Start Date : 11/20/2013
Page No : 1

Groups Printed- Turning Movements

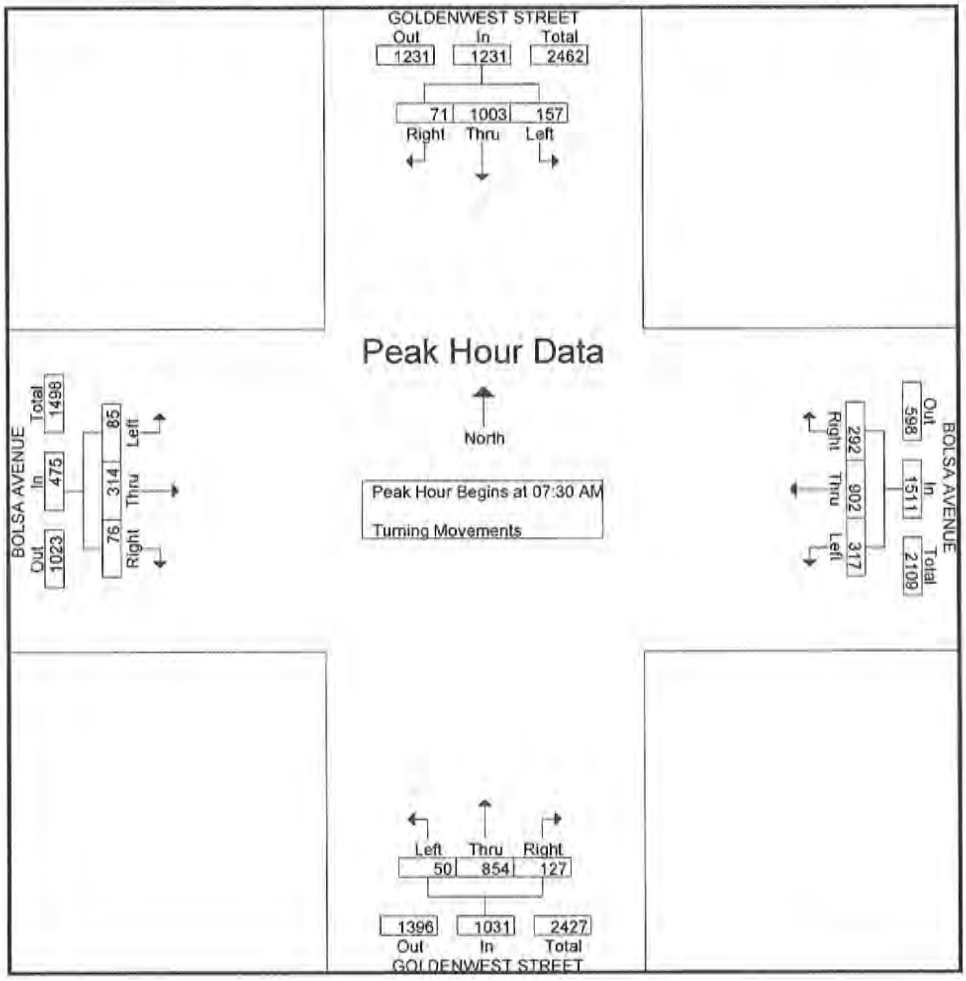
	GOLDENWEST STREET Southbound			BOLSA AVENUE Westbound			GOLDENWEST STREET Northbound			BOLSA AVENUE Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
07:00 AM	23	145	21	44	141	27	29	160	10	8	54	12	674
07:15 AM	23	205	40	60	162	36	36	186	9	15	79	16	867
07:30 AM	11	246	45	80	206	64	19	221	12	22	86	26	1038
07:45 AM	29	295	41	81	274	113	38	192	8	18	64	12	1165
Total	86	891	147	265	783	240	122	759	39	63	283	66	3744
08:00 AM	19	227	39	59	210	78	27	206	13	19	91	17	1005
08:15 AM	12	235	32	72	212	62	43	235	17	17	73	30	1040
08:30 AM	17	247	30	92	187	50	25	193	12	22	95	19	989
08:45 AM	8	260	25	84	202	76	36	216	13	16	69	10	1015
Total	56	969	126	307	811	266	131	850	55	74	328	76	4049
*** BREAK ***													
04:00 PM	19	207	27	90	165	50	61	309	52	43	188	46	1257
04:15 PM	16	267	23	122	182	65	52	269	59	28	204	43	1330
04:30 PM	15	218	29	114	140	57	73	272	49	41	198	50	1256
04:45 PM	27	232	32	128	175	81	74	343	43	39	253	53	1480
Total	77	924	111	454	662	253	260	1193	203	151	843	192	5323
05:00 PM	16	271	29	120	169	60	76	254	51	33	170	43	1292
05:15 PM	7	199	27	132	150	73	37	354	69	17	263	66	1394
05:30 PM	27	276	23	138	169	68	47	353	58	42	204	59	1464
05:45 PM	21	277	25	113	164	69	54	293	49	30	246	45	1386
Total	71	1023	104	503	652	270	214	1254	227	122	883	213	5536
Grand Total	290	3807	488	1529	2908	1029	727	4056	524	410	2337	547	18652
Apprch %	6.3	83	10.6	28	53.2	18.8	13.7	76.4	9.9	12.4	70.9	16.6	
Total %	1.6	20.4	2.6	8.2	15.6	5.5	3.9	21.7	2.8	2.2	12.5	2.9	

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOLDENWEST STREET
E-W Direction: BOLSA AVENUE

File Name : H1311100
Site Code : 00000553
Start Date : 11/20/2013
Page No : 2

	GOLDENWEST STREET Southbound				BOLSA AVENUE Westbound				GOLDENWEST STREET Northbound				BOLSA AVENUE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	11	246	**45**	302	80	206	64	350	19	221	12	252	**22**	86	26	**134**	1038
07:45 AM	**29**	**295**	41	**365**	**81**	**274**	**113**	**468**	38	192	8	238	18	64	12	94	**1165**
08:00 AM	19	227	39	285	59	210	78	347	27	206	13	246	19	**91**	17	127	1005
08:15 AM	12	235	32	279	72	212	62	346	**43**	**235**	**17**	**295**	17	73	**30**	120	1040
Total Volume	71	1003	157	1231	292	902	317	1511	127	854	50	1031	76	314	85	475	4248
% App. Total	5.8	81.5	12.8		19.3	59.7	21		12.3	82.8	4.8		16	66.1	17.9		
PHF	.612	.850	.872	.843	.901	.823	.701	.807	.738	.909	.735	.874	.864	.863	.708	.886	.912

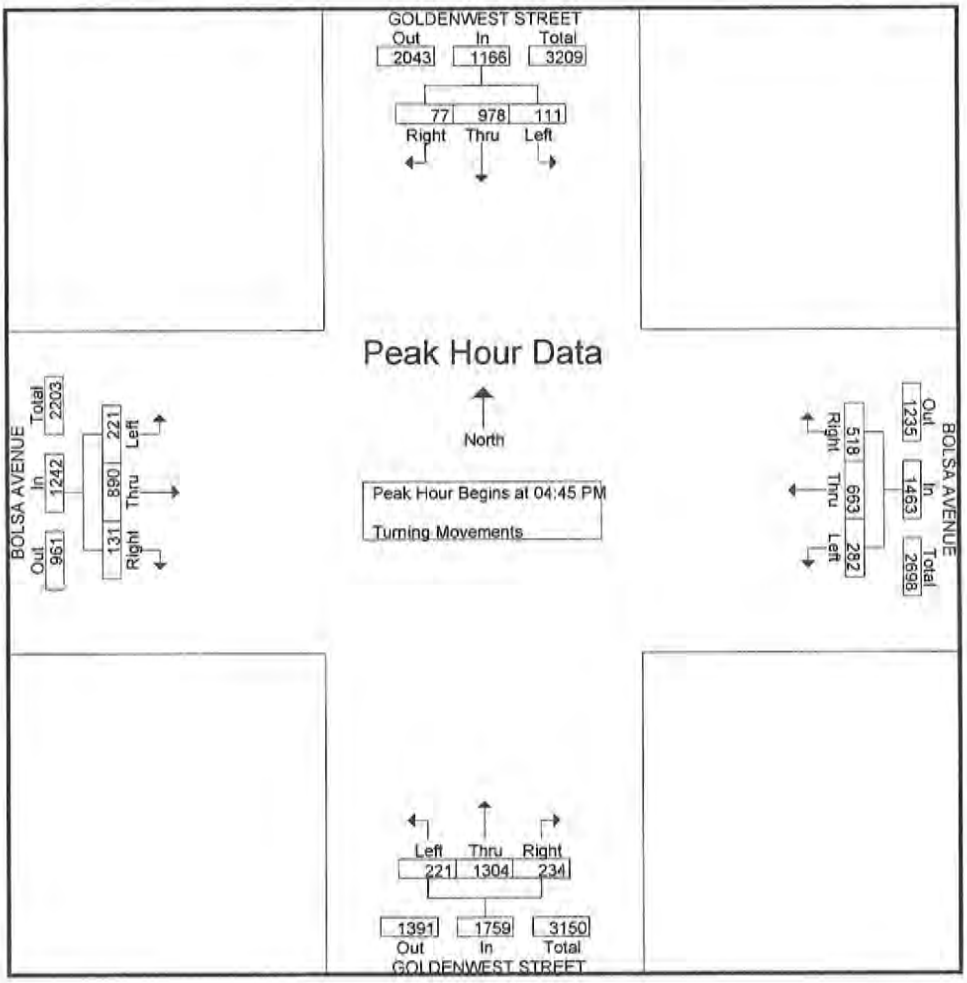


Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOLDENWEST STREET
E-W Direction: BOLSA AVENUE

File Name : H1311100
Site Code : 00000553
Start Date : 11/20/2013
Page No : 3

	GOLDENWEST STREET Southbound				BOLSA AVENUE Westbound				GOLDENWEST STREET Northbound				BOLSA AVENUE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	27	232	32	291	128	175	81	384	74	343	43	460	39	253	53	345	1480
05:00 PM	16	271	29	316	120	169	60	349	76	254	51	381	33	170	43	246	1292
05:15 PM	7	199	27	233	132	150	73	355	37	354	69	460	17	263	66	346	1394
05:30 PM	27	276	23	326	138	169	68	375	47	353	58	458	42	204	59	305	1464
Total Volume	77	978	111	1166	518	663	282	1463	234	1304	221	1759	131	890	221	1242	5630
% App. Total	6.6	83.9	9.5		35.4	45.3	19.3		13.3	74.1	12.6		10.5	71.7	17.8		
PHF	.713	.886	.867	.894	.938	.947	.870	.952	.770	.921	.801	.956	.780	.846	.837	.897	.951



(5)

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOLDENWEST STREET
E-W Direction: MCFADDEN AVENUE

File Name : H1311101
Site Code : 00005058
Start Date : 11/20/2013
Page No : 1

Groups Printed- Turning Movements

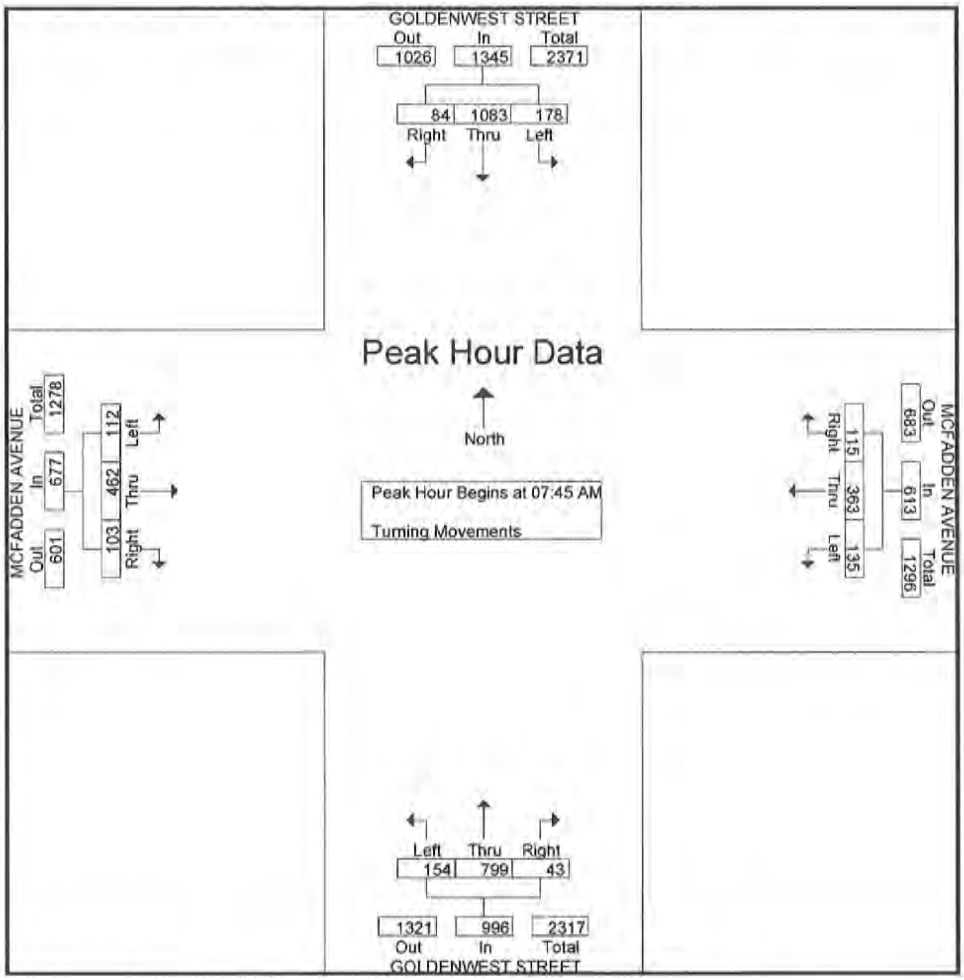
	GOLDENWEST STREET Southbound			MCFADDEN AVENUE Westbound			GOLDENWEST STREET Northbound			MCFADDEN AVENUE Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
07:00 AM	17	164	32	19	70	5	11	194	8	11	46	14	591
07:15 AM	17	176	45	25	69	11	3	210	13	12	77	24	682
07:30 AM	16	267	40	27	54	23	17	202	11	19	80	14	770
07:45 AM	23	316	51	27	102	41	9	176	70	48	97	19	979
Total	73	923	168	98	295	80	40	782	102	90	300	71	3022
08:00 AM	22	254	54	29	87	28	9	205	54	14	122	49	927
08:15 AM	24	258	39	32	100	38	18	199	17	21	124	18	888
08:30 AM	15	255	34	27	74	28	7	219	13	20	119	26	837
08:45 AM	15	253	41	42	95	29	4	211	9	26	127	21	873
Total	76	1020	168	130	356	123	38	834	93	81	492	114	3525
*** BREAK ***													
04:00 PM	20	245	59	72	112	37	16	289	14	21	103	27	1015
04:15 PM	21	269	46	89	102	34	32	281	54	22	113	42	1105
04:30 PM	13	278	45	61	120	42	21	285	32	22	111	38	1068
04:45 PM	22	291	47	88	113	36	21	318	29	28	123	41	1157
Total	76	1083	197	310	447	149	90	1173	129	93	450	148	4345
05:00 PM	26	300	47	65	132	45	27	292	51	28	127	30	1170
05:15 PM	14	289	52	114	131	35	21	298	66	20	147	45	1232
05:30 PM	14	317	47	82	112	46	24	236	55	21	124	22	1100
05:45 PM	19	300	63	75	111	50	28	279	23	45	115	33	1141
Total	73	1206	209	336	486	176	100	1105	195	114	513	130	4643
Grand Total	298	4232	742	874	1584	528	268	3894	519	378	1755	463	15535
Apprch %	5.7	80.3	14.1	29.3	53	17.7	5.7	83.2	11.1	14.6	67.6	17.8	
Total %	1.9	27.2	4.8	5.6	10.2	3.4	1.7	25.1	3.3	2.4	11.3	3	

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOLDENWEST STREET
E-W Direction: MCFADDEN AVENUE

File Name : H1311101
Site Code : 00005058
Start Date : 11/20/2013
Page No : 2

	GOLDENWEST STREET Southbound				MCFADDEN AVENUE Westbound				GOLDENWEST STREET Northbound				MCFADDEN AVENUE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	23	**316**	51	**390**	27	**102**	**41**	**170**	9	176	**70**	255	**48**	97	19	164	**979**
08:00 AM	22	254	**54**	330	29	87	28	144	9	205	54	**268**	14	122	**49**	**185**	927
08:15 AM	**24**	258	39	321	**32**	100	38	170	**18**	199	17	234	21	**124**	18	163	888
08:30 AM	15	255	34	304	27	74	28	129	7	**219**	13	239	20	119	26	165	837
Total Volume	84	1083	178	1345	115	363	135	613	43	799	154	996	103	462	112	677	3631
% App. Total	6.2	80.5	13.2		18.8	59.2	22		4.3	80.2	15.5		15.2	68.2	16.5		
PHF	.875	.857	.824	.862	.898	.890	.823	.901	.597	.912	.550	.929	.536	.931	.571	.915	.927

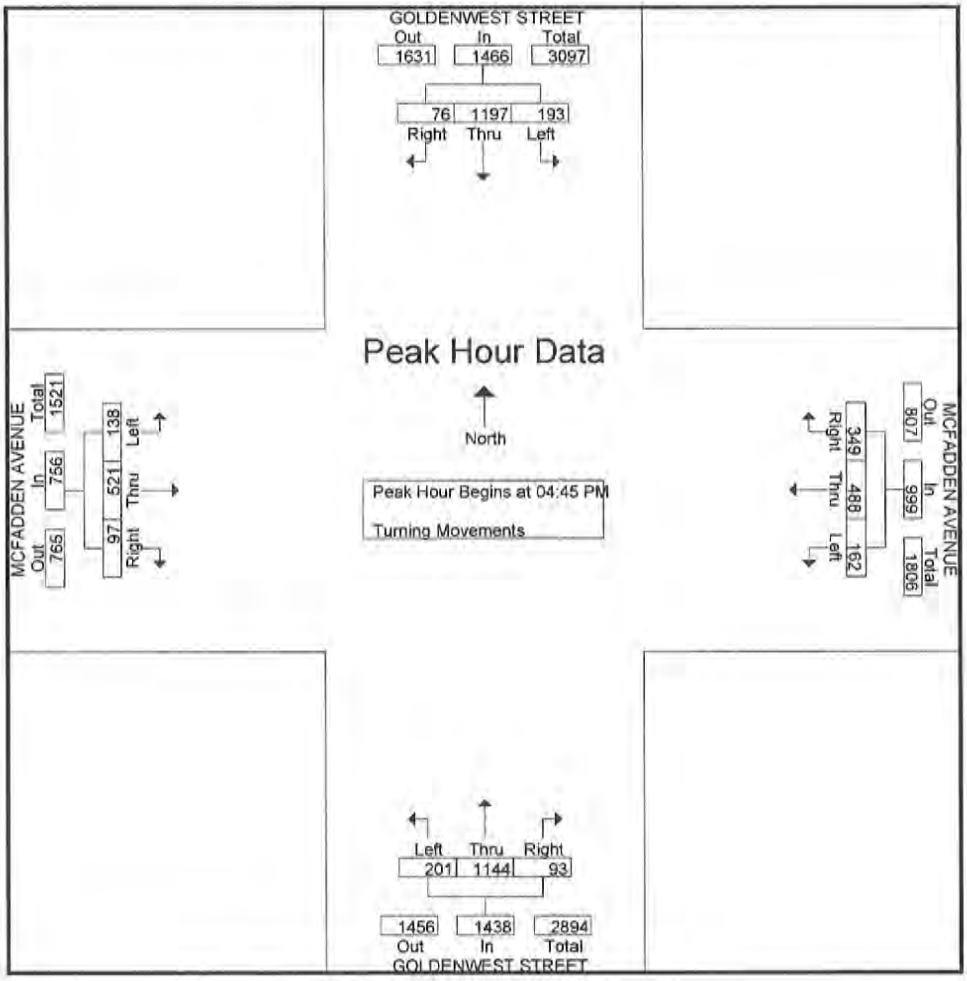


Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOLDENWEST STREET
E-W Direction: MCFADDEN AVENUE

File Name : H1311101
Site Code : 00005058
Start Date : 11/20/2013
Page No : 3

	GOLDENWEST STREET Southbound				MCFADDEN AVENUE Westbound				GOLDENWEST STREET Northbound				MCFADDEN AVENUE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	22	291	47	360	88	113	36	237	21	**318**	29	368	**28**	123	41	192	1157
05:00 PM	**26**	300	47	373	65	**132**	45	242	**27**	292	51	370	28	127	30	185	1170
05:15 PM	14	289	**52**	355	**114**	131	35	**280**	21	298	**66**	**385**	20	**147**	**45**	**212**	**1232**
05:30 PM	14	**317**	47	**378**	82	112	**46**	240	24	236	55	315	21	124	22	167	1100
Total Volume	76	1197	193	1466	349	488	162	999	93	1144	201	1438	97	521	138	756	4659
% App. Total	5.2	81.7	13.2		34.9	48.8	16.2		6.5	79.6	14		12.8	68.9	18.3		
PHF	.731	.944	.928	.970	.765	.924	.880	.892	.861	.899	.761	.934	.866	.886	.767	.892	.945



(6)

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOLDENWEST STREET
E-W Direction: DRIVEWAY 12

File Name : H1311042
Site Code : 00003873
Start Date : 10/30/2013
Page No : 1

Groups Printed- Turning Movements

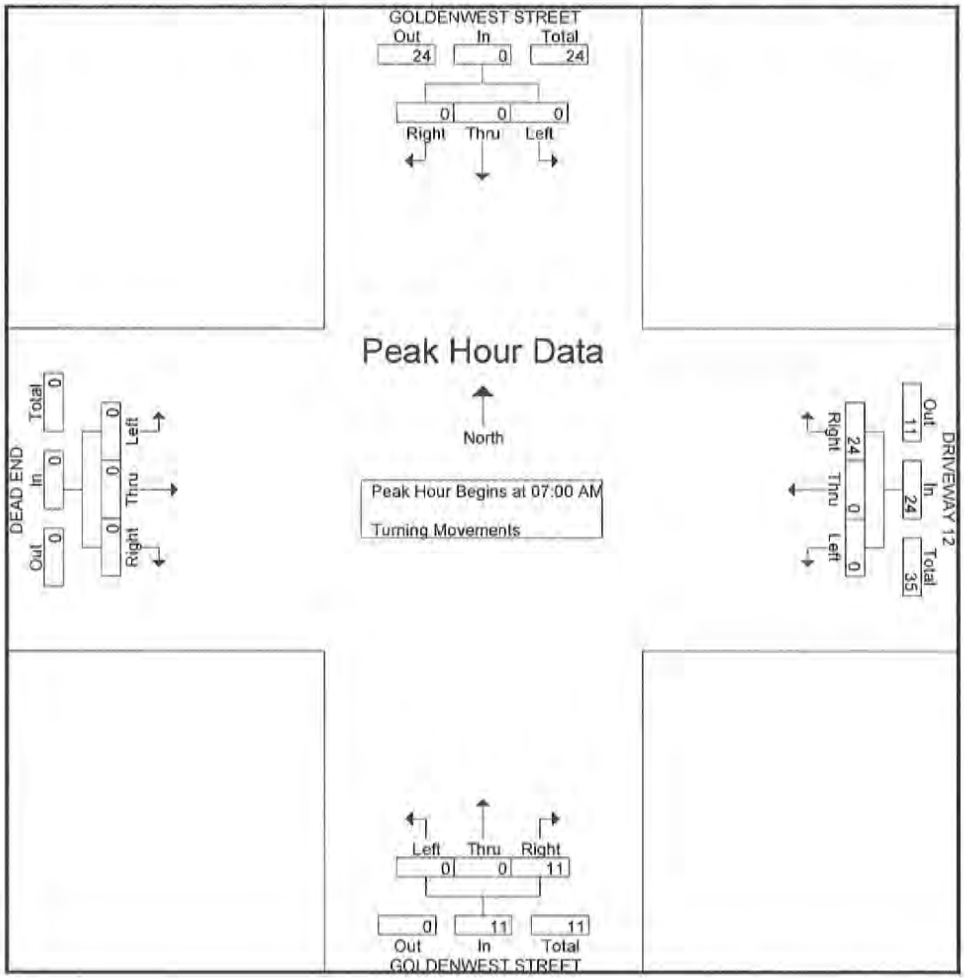
	GOLDENWEST STREET Southbound			DRIVEWAY 12 Westbound			GOLDENWEST STREET Northbound			DEAD END Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
07:00 AM	0	0	0	5	0	0	1	0	0	0	0	0	6
07:15 AM	0	0	0	5	0	0	0	0	0	0	0	0	5
07:30 AM	0	0	0	5	0	0	2	0	0	0	0	0	7
07:45 AM	0	0	0	9	0	0	8	0	0	0	0	0	17
Total	0	0	0	24	0	0	11	0	0	0	0	0	35
08:00 AM	0	0	0	3	0	0	1	0	0	0	0	0	4
08:15 AM	0	0	0	3	0	0	0	0	0	0	0	0	3
08:30 AM	0	0	0	3	0	0	0	0	0	0	0	0	3
08:45 AM	0	0	0	4	0	0	3	0	0	0	0	0	7
Total	0	0	0	13	0	0	4	0	0	0	0	0	17
*** BREAK ***													
04:00 PM	0	0	0	18	0	0	4	0	0	0	0	0	22
04:15 PM	0	0	0	16	0	0	2	0	0	0	0	0	18
04:30 PM	0	0	0	13	0	0	4	0	0	0	0	0	17
04:45 PM	0	0	0	10	0	0	2	0	0	0	0	0	12
Total	0	0	0	57	0	0	12	0	0	0	0	0	69
05:00 PM	0	0	0	10	0	0	6	0	0	0	0	0	16
05:15 PM	0	0	0	8	0	0	5	0	0	0	0	0	13
05:30 PM	0	0	0	11	0	0	6	0	0	0	0	0	17
05:45 PM	0	0	0	8	0	0	2	0	0	0	0	0	10
Total	0	0	0	37	0	0	19	0	0	0	0	0	56
Grand Total	0	0	0	131	0	0	46	0	0	0	0	0	177
Apprch %	0	0	0	100	0	0	100	0	0	0	0	0	
Total %	0	0	0	74	0	0	26	0	0	0	0	0	

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOLDENWEST STREET
E-W Direction: DRIVEWAY 12

File Name : H1311042
Site Code : 00003873
Start Date : 10/30/2013
Page No : 2

	GOLDENWEST STREET Southbound				DRIVEWAY 12 Westbound				GOLDENWEST STREET Northbound				DEAD END Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	5	0	0	5	1	0	0	1	0	0	0	0	6
07:15 AM	0	0	0	0	5	0	0	5	0	0	0	0	0	0	0	0	5
07:30 AM	0	0	0	0	5	0	0	5	2	0	0	2	0	0	0	0	7
07:45 AM	0	0	0	0	9	0	0	9	8	0	0	8	0	0	0	0	17
Total Volume	0	0	0	0	24	0	0	24	11	0	0	11	0	0	0	0	35
% App. Total	0	0	0		100	0	0		100	0	0		0	0	0		
PHF	.000	.000	.000	.000	.667	.000	.000	.667	.344	.000	.000	.344	.000	.000	.000	.000	.515

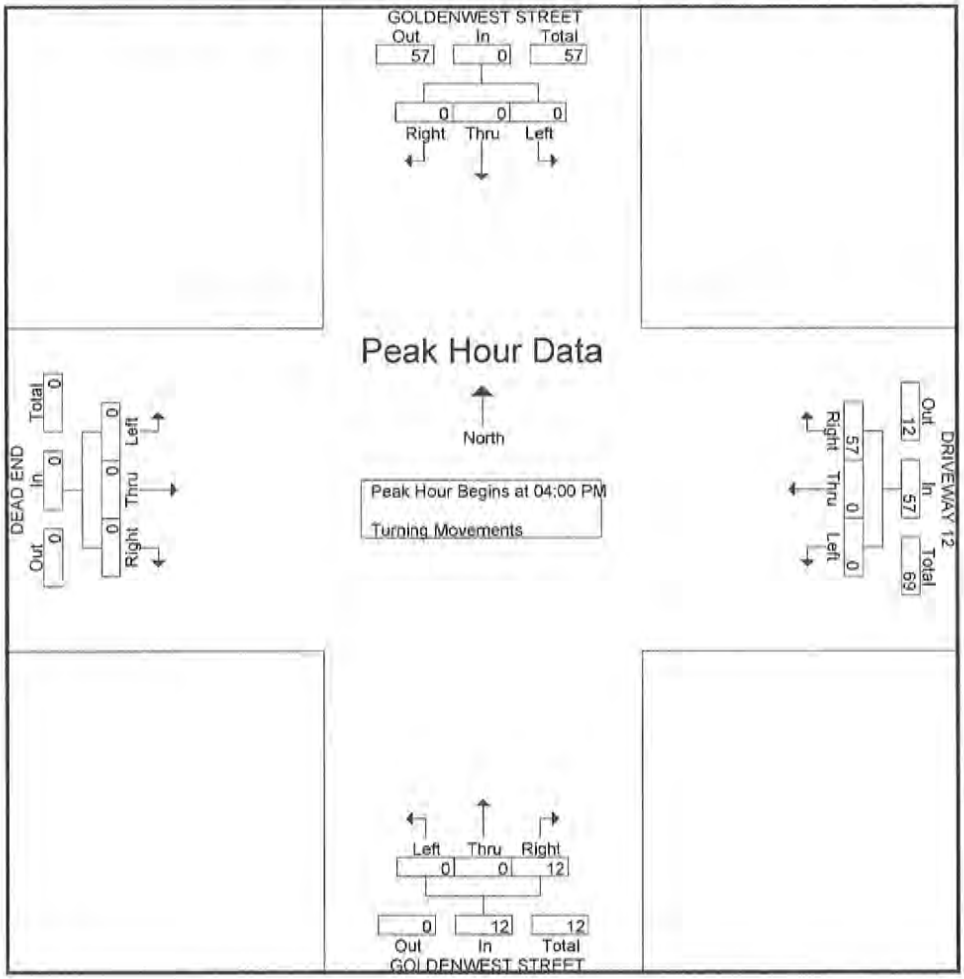


Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOLDENWEST STREET
E-W Direction: DRIVEWAY 12

File Name : H1311042
Site Code : 00003873
Start Date : 10/30/2013
Page No : 3

	GOLDENWEST STREET Southbound				DRIVEWAY 12 Westbound				GOLDENWEST STREET Northbound				DEAD END Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	**18**	0	0	**18**	**4**	0	0	**4**	0	0	0	0	**22**
04:15 PM	0	0	0	0	16	0	0	16	2	0	0	2	0	0	0	0	18
04:30 PM	0	0	0	0	13	0	0	13	4	0	0	4	0	0	0	0	17
04:45 PM	0	0	0	0	10	0	0	10	2	0	0	2	0	0	0	0	12
Total Volume	0	0	0	0	57	0	0	57	12	0	0	12	0	0	0	0	69
% App. Total	0	0	0		100	0	0		100	0	0		0	0	0		
PHF	.000	.000	.000	.000	.792	.000	.000	.792	.750	.000	.000	.750	.000	.000	.000	.000	.784



Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOLDENWEST STREET
E-W Direction: DRIVEWAY 11

File Name : H1311041
Site Code : 00000571
Start Date : 10/30/2013
Page No : 1

Groups Printed- Turning Movements

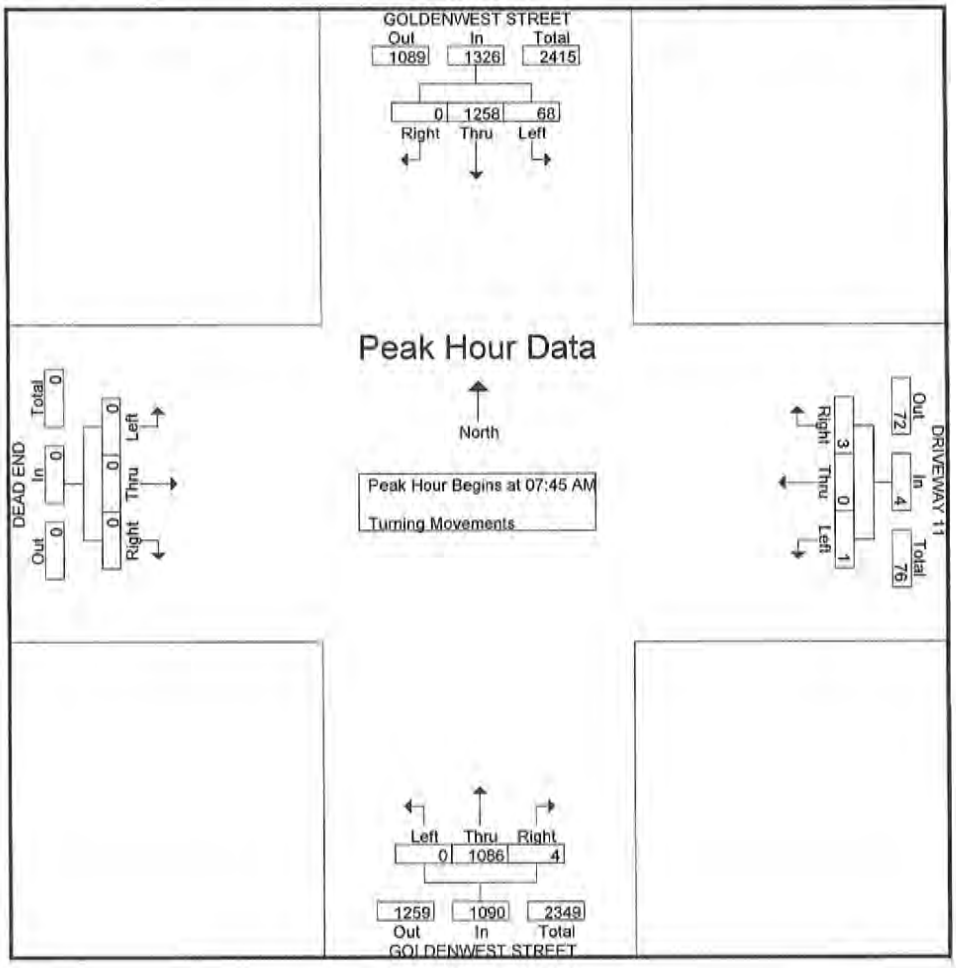
	GOLDENWEST STREET Southbound			DRIVEWAY 11 Westbound			GOLDENWEST STREET Northbound			DEAD END Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
07:00 AM	0	193	6	0	0	0	1	192	0	0	0	0	392
07:15 AM	0	227	7	1	0	1	0	268	0	0	0	0	504
07:30 AM	0	302	19	2	0	1	1	236	0	0	0	0	561
07:45 AM	0	333	29	2	0	0	0	275	0	0	0	0	639
Total	0	1055	61	5	0	2	2	971	0	0	0	0	2096
08:00 AM	0	338	17	0	0	1	2	277	0	0	0	0	635
08:15 AM	0	277	8	0	0	0	1	297	0	0	0	0	583
08:30 AM	0	310	14	1	0	0	1	237	0	0	0	0	563
08:45 AM	0	280	24	2	0	0	2	246	0	0	0	0	554
Total	0	1205	63	3	0	1	6	1057	0	0	0	0	2335
*** BREAK ***													
04:00 PM	0	293	17	24	0	1	3	310	0	0	0	0	648
04:15 PM	0	291	33	9	0	2	2	337	0	0	0	0	674
04:30 PM	0	292	29	20	0	8	1	338	0	0	0	0	688
04:45 PM	0	359	43	12	0	1	9	349	0	0	0	0	773
Total	0	1235	122	65	0	12	15	1334	0	0	0	0	2783
05:00 PM	0	354	43	5	0	4	7	371	0	0	0	0	784
05:15 PM	0	319	29	13	0	3	3	377	0	0	0	0	744
05:30 PM	0	338	46	11	0	6	5	337	0	0	0	0	743
05:45 PM	0	287	68	3	0	1	10	307	0	0	0	0	676
Total	0	1298	186	32	0	14	25	1392	0	0	0	0	2947
Grand Total	0	4793	432	105	0	29	48	4754	0	0	0	0	10161
Apprch %	0	91.7	8.3	78.4	0	21.6	1	99	0	0	0	0	
Total %	0	47.2	4.3	1	0	0.3	0.5	46.8	0	0	0	0	

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOLDENWEST STREET
E-W Direction: DRIVEWAY 11

File Name : H1311041
Site Code : 00000571
Start Date : 10/30/2013
Page No : 2

	GOLDENWEST STREET Southbound				DRIVEWAY 11 Westbound				GOLDENWEST STREET Northbound				DEAD END Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	333	29	362	2	0	0	2	0	275	0	275	0	0	0	0	639
08:00 AM	0	338	17	355	0	0	1	1	2	277	0	279	0	0	0	0	635
08:15 AM	0	277	8	285	0	0	0	0	1	297	0	298	0	0	0	0	583
08:30 AM	0	310	14	324	1	0	0	1	1	237	0	238	0	0	0	0	563
Total Volume	0	1258	68	1326	3	0	1	4	4	1086	0	1090	0	0	0	0	2420
% App. Total	0	94.9	5.1		75	0	25		0.4	99.6	0		0	0	0		
PHF	.000	.930	.586	.916	.375	.000	.250	.500	.500	.914	.000	.914	.000	.000	.000	.000	.947

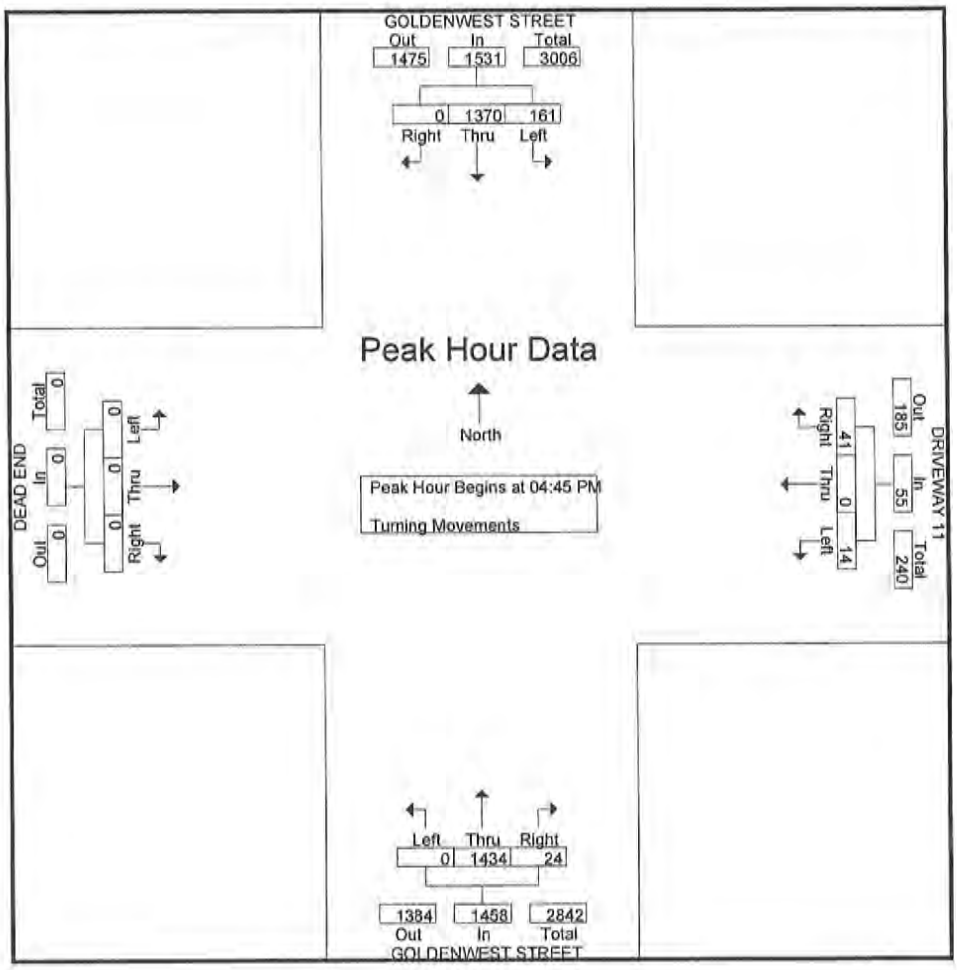


Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOLDENWEST STREET
E-W Direction: DRIVEWAY 11

File Name : H1311041
Site Code : 00000571
Start Date : 10/30/2013
Page No : 3

	GOLDENWEST STREET Southbound				DRIVEWAY 11 Westbound				GOLDENWEST STREET Northbound				DEAD END Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	**359**	43	**402**	12	0	1	13	9	349	0	358	0	0	0	0	773
05:00 PM	0	354	43	397	5	0	4	9	7	371	0	378	0	0	0	0	**784**
05:15 PM	0	319	29	348	**13**	0	3	16	3	**377**	0	**380**	0	0	0	0	744
05:30 PM	0	338	**46**	384	11	0	**6**	**17**	5	337	0	342	0	0	0	0	743
Total Volume	0	1370	161	1531	41	0	14	55	24	1434	0	1458	0	0	0	0	3044
% App. Total	0	89.5	10.5		74.5	0	25.5		1.6	98.4	0		0	0	0		
PHF	.000	.954	.875	.952	.788	.000	.583	.809	.667	.951	.000	.959	.000	.000	.000	.000	.971



(8)

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOLDENWEST STREET
E-W Direction: DRIVEWAY 10

File Name : H1311040
Site Code : 00003872
Start Date : 10/30/2013
Page No : 1

Groups Printed- Turning Movements

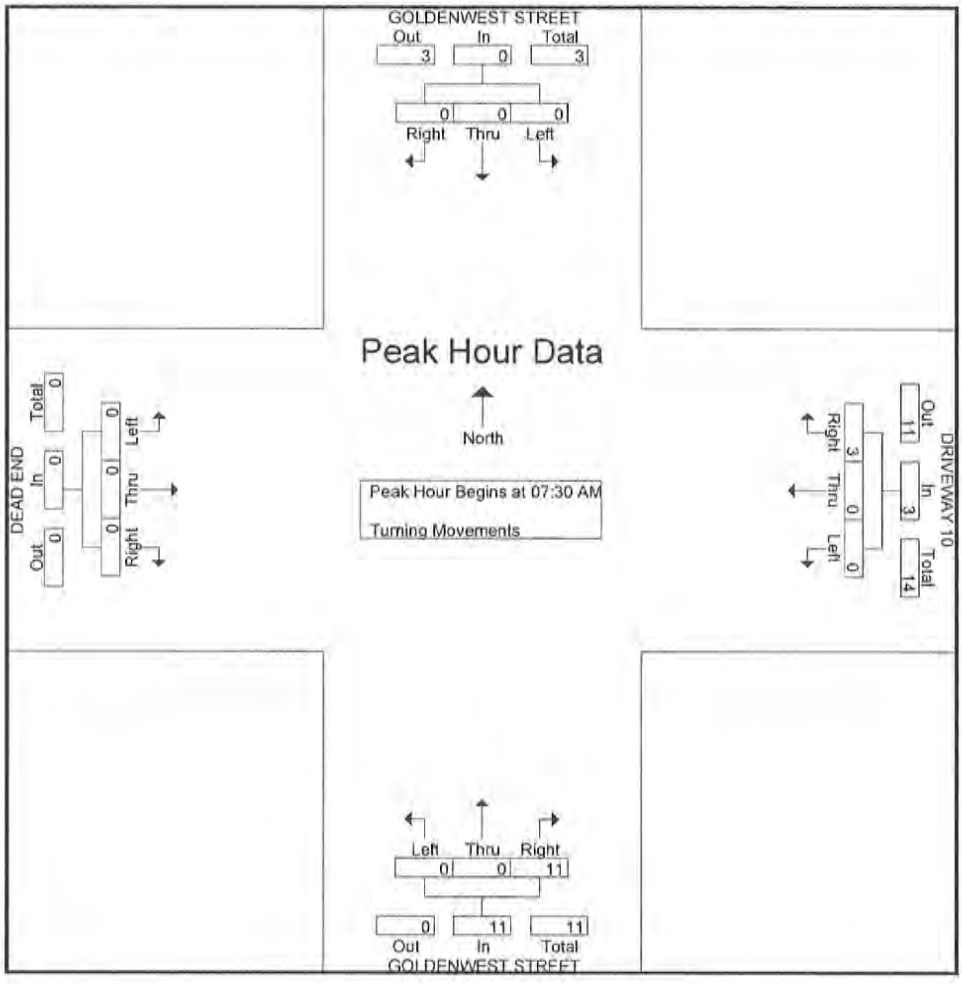
	GOLDENWEST STREET Southbound			DRIVEWAY 10 Westbound			GOLDENWEST STREET Northbound			DEAD END Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
07:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	1
*** BREAK ***													
07:30 AM	0	0	0	1	0	0	3	0	0	0	0	0	4
07:45 AM	0	0	0	1	0	0	7	0	0	0	0	0	8
Total	0	0	0	2	0	0	11	0	0	0	0	0	13
08:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	1
08:15 AM	0	0	0	1	0	0	0	0	0	0	0	0	1
*** BREAK ***													
08:45 AM	0	0	0	3	0	0	6	0	0	0	0	0	9
Total	0	0	0	4	0	0	7	0	0	0	0	0	11
*** BREAK ***													
04:00 PM	0	0	0	19	0	0	1	0	0	0	0	0	20
04:15 PM	0	0	0	12	0	0	3	0	0	0	0	0	15
04:30 PM	0	0	0	22	0	0	0	0	0	0	0	0	22
04:45 PM	0	0	0	26	0	0	3	0	0	0	0	0	29
Total	0	0	0	79	0	0	7	0	0	0	0	0	86
05:00 PM	0	0	0	11	0	0	2	0	0	0	0	0	13
05:15 PM	0	0	0	9	0	0	2	0	0	0	0	0	11
05:30 PM	0	0	0	12	0	0	5	0	0	0	0	0	17
05:45 PM	0	0	0	7	0	0	14	0	0	0	0	0	21
Total	0	0	0	39	0	0	23	0	0	0	0	0	62
Grand Total	0	0	0	124	0	0	48	0	0	0	0	0	172
Apprch %	0	0	0	100	0	0	100	0	0	0	0	0	
Total %	0	0	0	72.1	0	0	27.9	0	0	0	0	0	

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOLDENWEST STREET
E-W Direction: DRIVEWAY 10

File Name : H1311040
Site Code : 00003872
Start Date : 10/30/2013
Page No : 2

	GOLDENWEST STREET Southbound				DRIVEWAY 10 Westbound				GOLDENWEST STREET Northbound				DEAD END Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	1	0	0	1	3	0	0	3	0	0	0	0	4
07:45 AM	0	0	0	0	1	0	0	1	7	0	0	7	0	0	0	0	8
08:00 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
08:15 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
Total Volume	0	0	0	0	3	0	0	3	11	0	0	11	0	0	0	0	14
% App. Total	0	0	0		100	0	0		100	0	0		0	0	0		
PHF	.000	.000	.000	.000	.750	.000	.000	.750	.393	.000	.000	.393	.000	.000	.000	.000	.438

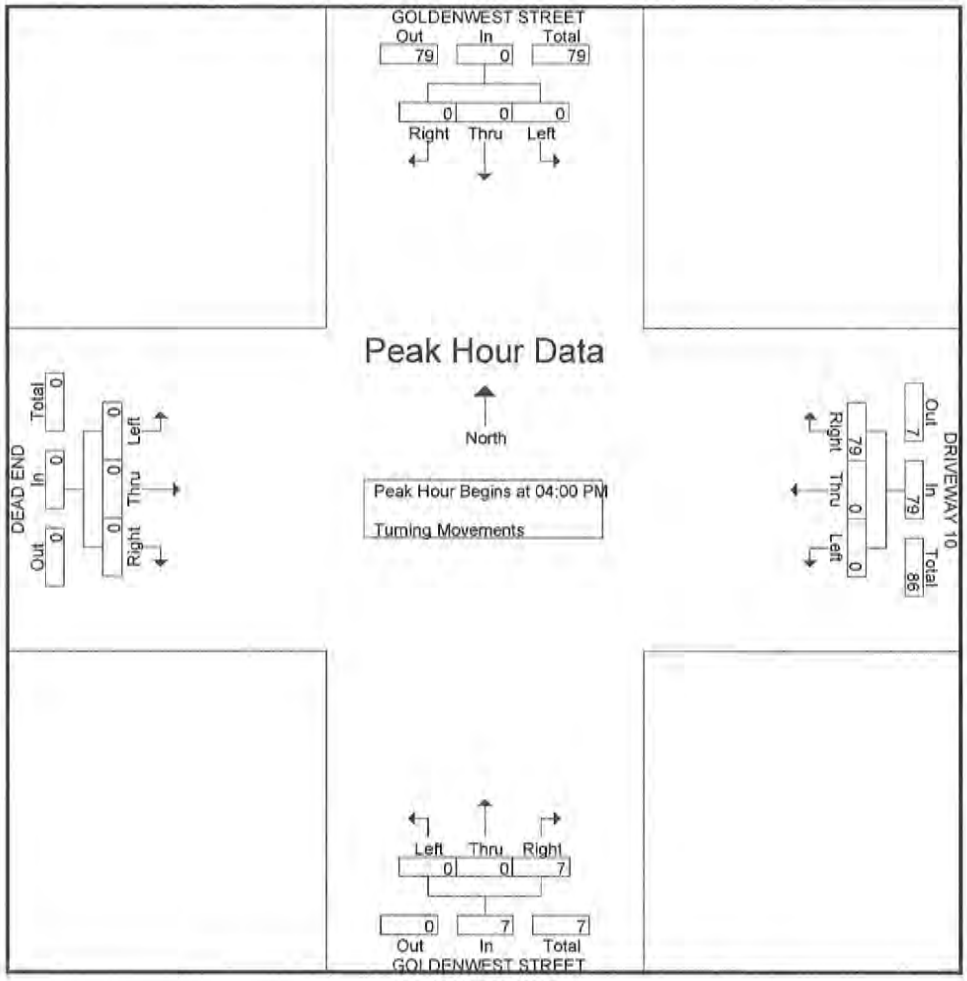


Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOLDENWEST STREET
E-W Direction: DRIVEWAY 10

File Name : H1311040
Site Code : 00003872
Start Date : 10/30/2013
Page No : 3

	GOLDENWEST STREET Southbound				DRIVEWAY 10 Westbound				GOLDENWEST STREET Northbound				DEAD END Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	19	0	0	19	1	0	0	1	0	0	0	0	20
04:15 PM	0	0	0	0	12	0	0	12	3	0	0	3	0	0	0	0	15
04:30 PM	0	0	0	0	22	0	0	22	0	0	0	0	0	0	0	0	22
04:45 PM	0	0	0	0	**26**	0	0	**26**	3	0	0	3	0	0	0	0	**29**
Total Volume	0	0	0	0	79	0	0	79	7	0	0	7	0	0	0	0	86
% App. Total	0	0	0		100	0	0		100	0	0		0	0	0		
PHF	.000	.000	.000	.000	.760	.000	.000	.760	.583	.000	.000	.583	.000	.000	.000	.000	.741



Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOLDENWEST STREET
E-W Direction: WEST COLLEGE ENTRANCE

File Name : h1311039
Site Code : 00003874
Start Date : 10/30/2013
Page No : 1

Groups Printed- Turning Movements

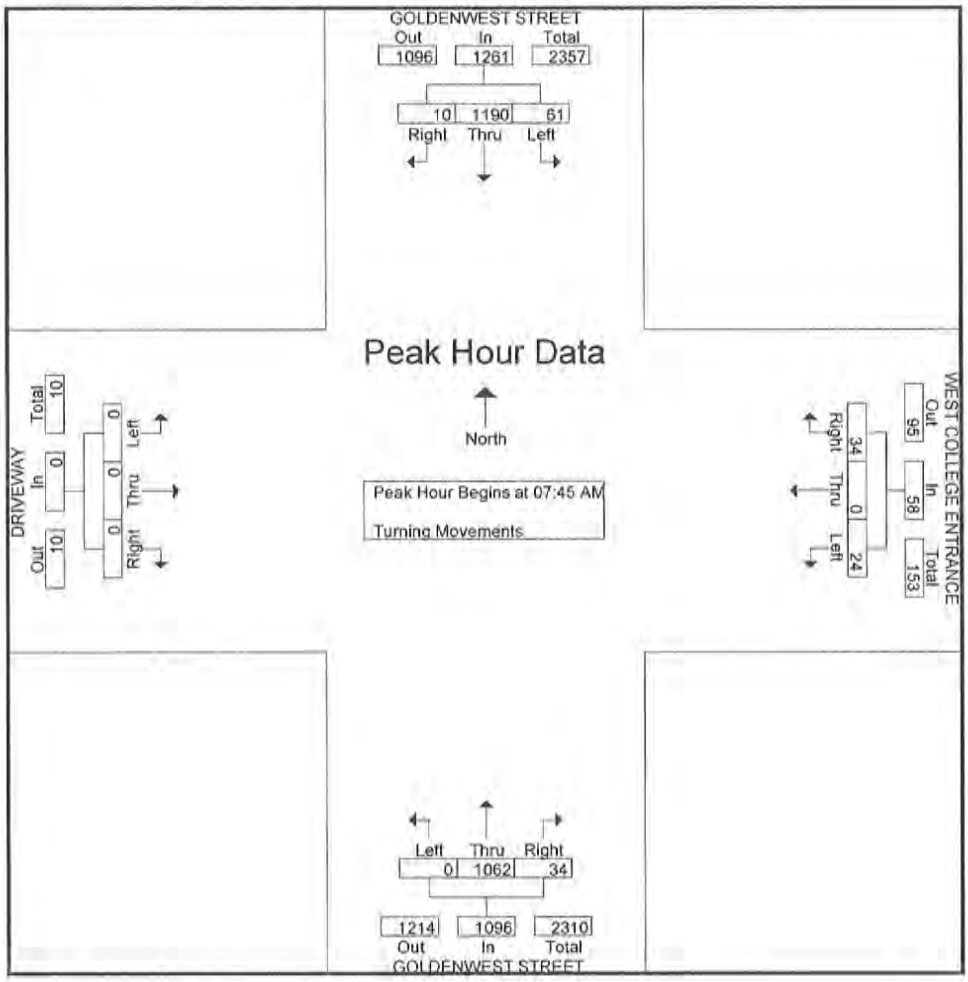
	GOLDENWEST STREET Southbound			WEST COLLEGE ENTRANCE Westbound			GOLDENWEST STREET Northbound			DRIVEWAY Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
07:00 AM	1	194	0	3	0	0	1	222	0	0	0	0	421
07:15 AM	0	231	5	2	0	0	2	221	0	0	0	0	461
07:30 AM	2	255	15	7	0	3	13	245	0	0	0	0	540
07:45 AM	1	327	29	6	0	8	16	275	0	0	0	0	662
Total	4	1007	49	18	0	11	32	963	0	0	0	0	2084
08:00 AM	3	290	11	11	0	6	8	268	0	0	0	0	597
08:15 AM	4	316	10	3	0	5	2	268	0	0	0	0	608
08:30 AM	2	257	11	14	0	5	8	251	0	0	0	0	548
08:45 AM	3	296	13	8	0	0	7	252	0	0	0	0	579
Total	12	1159	45	36	0	16	25	1039	0	0	0	0	2332
*** BREAK ***													
04:00 PM	1	292	5	17	0	11	4	299	0	2	0	0	631
04:15 PM	1	307	9	20	0	10	1	320	0	1	0	1	670
04:30 PM	0	317	11	11	0	17	4	329	0	2	0	0	691
04:45 PM	3	293	8	9	0	12	10	350	0	0	0	0	685
Total	5	1209	33	57	0	50	19	1298	0	5	0	1	2677
05:00 PM	0	318	14	21	0	18	11	344	0	0	0	0	726
05:15 PM	3	267	16	11	0	13	9	356	0	0	0	0	675
05:30 PM	0	335	11	18	0	9	4	337	0	3	0	1	718
05:45 PM	2	315	29	12	0	18	18	338	0	1	0	0	733
Total	5	1235	70	62	0	58	42	1375	0	4	0	1	2852
Grand Total	26	4610	197	173	0	135	118	4675	0	9	0	2	9945
Apprch %	0.5	95.4	4.1	56.2	0	43.8	2.5	97.5	0	81.8	0	18.2	
Total %	0.3	46.4	2	1.7	0	1.4	1.2	47	0	0.1	0	0	

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOLDENWEST STREET
E-W Direction: WEST COLLEGE ENTRANCE

File Name : h1311039
Site Code : 00003874
Start Date : 10/30/2013
Page No : 2

	GOLDENWEST STREET Southbound				WEST COLLEGE ENTRANCE Westbound				GOLDENWEST STREET Northbound				DRIVEWAY Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	1	**327**	**29**	**357**	6	0	**8**	14	**16**	**275**	0	**291**	0	0	0	0	**662**
08:00 AM	3	290	11	304	11	0	6	17	8	268	0	276	0	0	0	0	597
08:15 AM	**4**	316	10	330	3	0	5	8	2	268	0	270	0	0	0	0	608
08:30 AM	2	257	11	270	**14**	0	5	**19**	8	251	0	259	0	0	0	0	548
Total Volume	10	1190	61	1261	34	0	24	58	34	1062	0	1096	0	0	0	0	2415
% App. Total	0.8	94.4	4.8		58.6	0	41.4		3.1	96.9	0		0	0	0		
PHF	.625	.910	.526	.883	.607	.000	.750	.763	.531	.965	.000	.942	.000	.000	.000	.000	.912

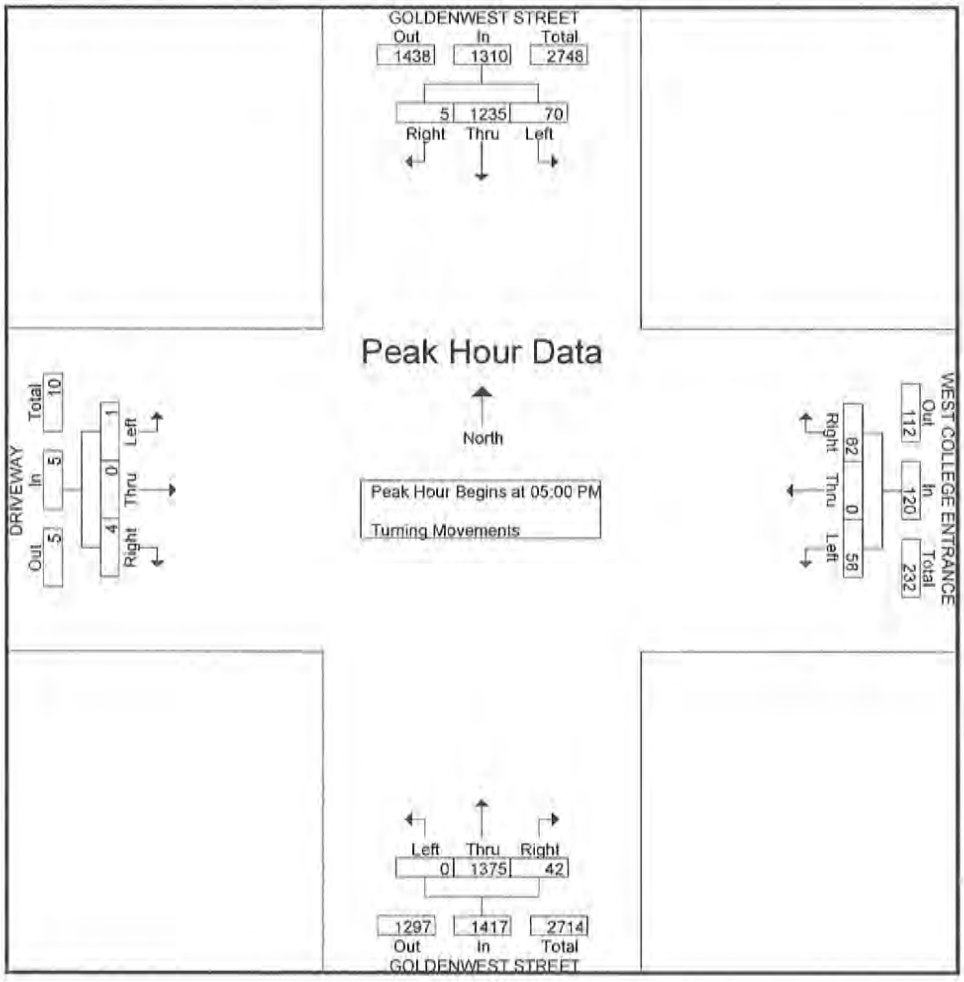


Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA 92780

City: HUNTINGTON BEACH
N-S Direction: GOLDENWEST STREET
E-W Direction: WEST COLLEGE ENTRANCE

File Name : h1311039
Site Code : 00003874
Start Date : 10/30/2013
Page No : 3

	GOLDENWEST STREET Southbound				WEST COLLEGE ENTRANCE Westbound				GOLDENWEST STREET Northbound				DRIVEWAY Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	318	14	332	**21**	0	**18**	**39**	11	344	0	355	0	0	0	0	726
05:15 PM	**3**	267	16	286	11	0	13	24	9	**356**	0	**365**	0	0	0	0	675
05:30 PM	0	**335**	11	**346**	18	0	9	27	4	337	0	341	**3**	0	1	**4**	718
05:45 PM	2	315	**29**	346	12	0	18	30	**18**	338	0	356	1	0	0	1	**733**
Total Volume	5	1235	70	1310	62	0	58	120	42	1375	0	1417	4	0	1	5	2852
% App. Total	0.4	94.3	5.3		51.7	0	48.3		3	97	0		80	0	20		
PHF	.417	.922	.603	.947	.738	.000	.806	.769	.583	.966	.000	.971	.333	.000	.250	.313	.973



(10)

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOLDENWEST STREET
E-W Direction: DRIVEWAY 8

File Name : H1311038
Site Code : 00005724
Start Date : 10/30/2013
Page No : 1

Groups Printed- Turning Movements 8

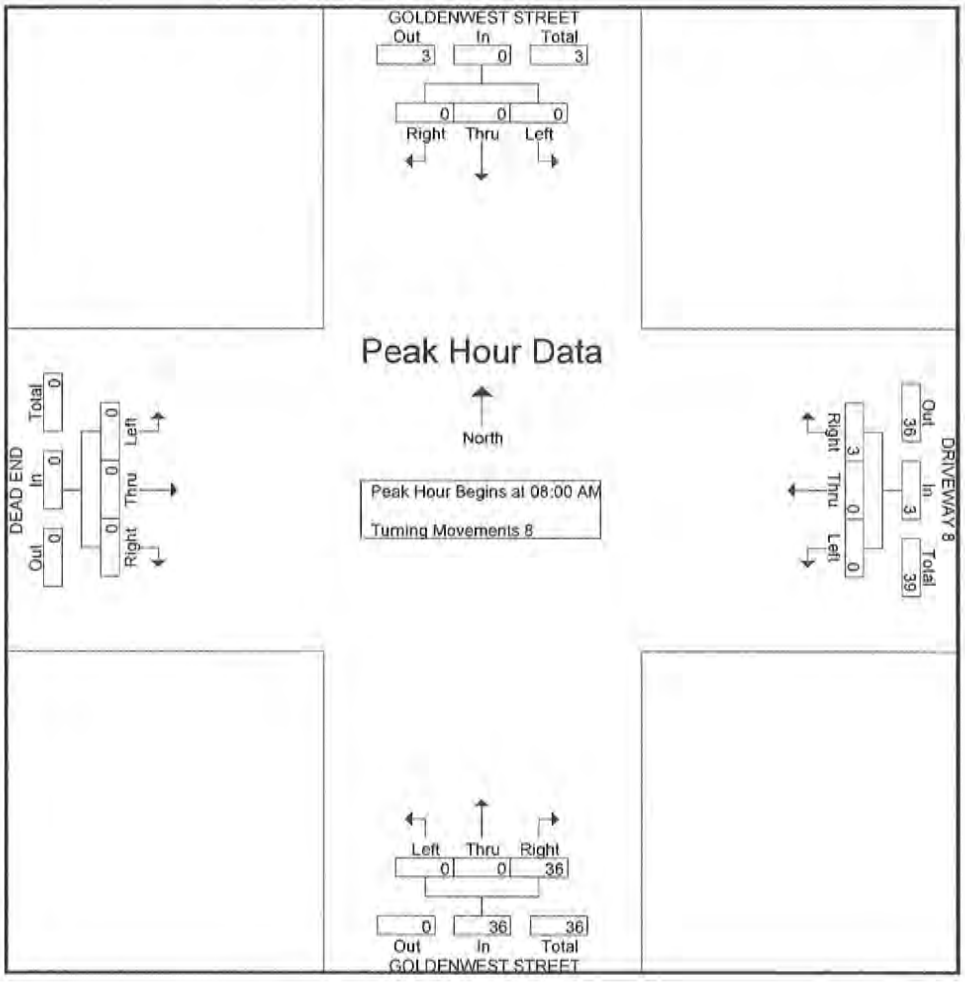
	GOLDENWEST STREET Southbound			DRIVEWAY 8 Westbound			GOLDENWEST STREET Northbound			DEAD END Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
*** BREAK ***													
07:30 AM	0	0	0	0	0	0	5	0	0	0	0	0	5
07:45 AM	0	0	0	2	0	0	13	0	0	0	0	0	15
Total	0	0	0	2	0	0	18	0	0	0	0	0	20
08:00 AM	0	0	0	0	0	0	9	0	0	0	0	0	9
08:15 AM	0	0	0	0	0	0	6	0	0	0	0	0	6
08:30 AM	0	0	0	1	0	0	7	0	0	0	0	0	8
08:45 AM	0	0	0	2	0	0	14	0	0	0	0	0	16
Total	0	0	0	3	0	0	36	0	0	0	0	0	39
*** BREAK ***													
04:00 PM	0	0	0	8	0	0	2	0	0	0	0	0	10
04:15 PM	0	0	0	10	0	0	1	0	0	0	0	0	11
04:30 PM	0	0	0	6	0	0	0	0	0	0	0	0	6
04:45 PM	0	0	0	7	0	0	5	0	0	0	0	0	12
Total	0	0	0	31	0	0	8	0	0	0	0	0	39
05:00 PM	0	0	0	4	0	0	5	0	0	0	0	0	9
05:15 PM	0	0	0	5	0	0	6	0	0	0	0	0	11
05:30 PM	0	0	0	2	0	0	11	0	0	0	0	0	13
05:45 PM	0	0	0	2	0	0	6	0	0	0	0	0	8
Total	0	0	0	13	0	0	28	0	0	0	0	0	41
Grand Total	0	0	0	49	0	0	90	0	0	0	0	0	139
Apprch %	0	0	0	100	0	0	100	0	0	0	0	0	
Total %	0	0	0	35.3	0	0	64.7	0	0	0	0	0	

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOLDENWEST STREET
E-W Direction: DRIVEWAY 8

File Name : H1311038
Site Code : 00005724
Start Date : 10/30/2013
Page No : 2

	GOLDENWEST STREET Southbound				DRIVEWAY 8 Westbound				GOLDENWEST STREET Northbound				DEAD END Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	0	0	0	0	0	0	0	9	0	0	9	0	0	0	0	9
08:15 AM	0	0	0	0	0	0	0	0	6	0	0	6	0	0	0	0	6
08:30 AM	0	0	0	0	1	0	0	1	7	0	0	7	0	0	0	0	8
08:45 AM	0	0	0	0	**2**	0	0	**2**	**14**	0	0	**14**	0	0	0	0	**16**
Total Volume	0	0	0	0	3	0	0	3	36	0	0	36	0	0	0	0	39
% App. Total	0	0	0		100	0	0		100	0	0		0	0	0		
PHF	.000	.000	.000	.000	.375	.000	.000	.375	.643	.000	.000	.643	.000	.000	.000	.000	.609

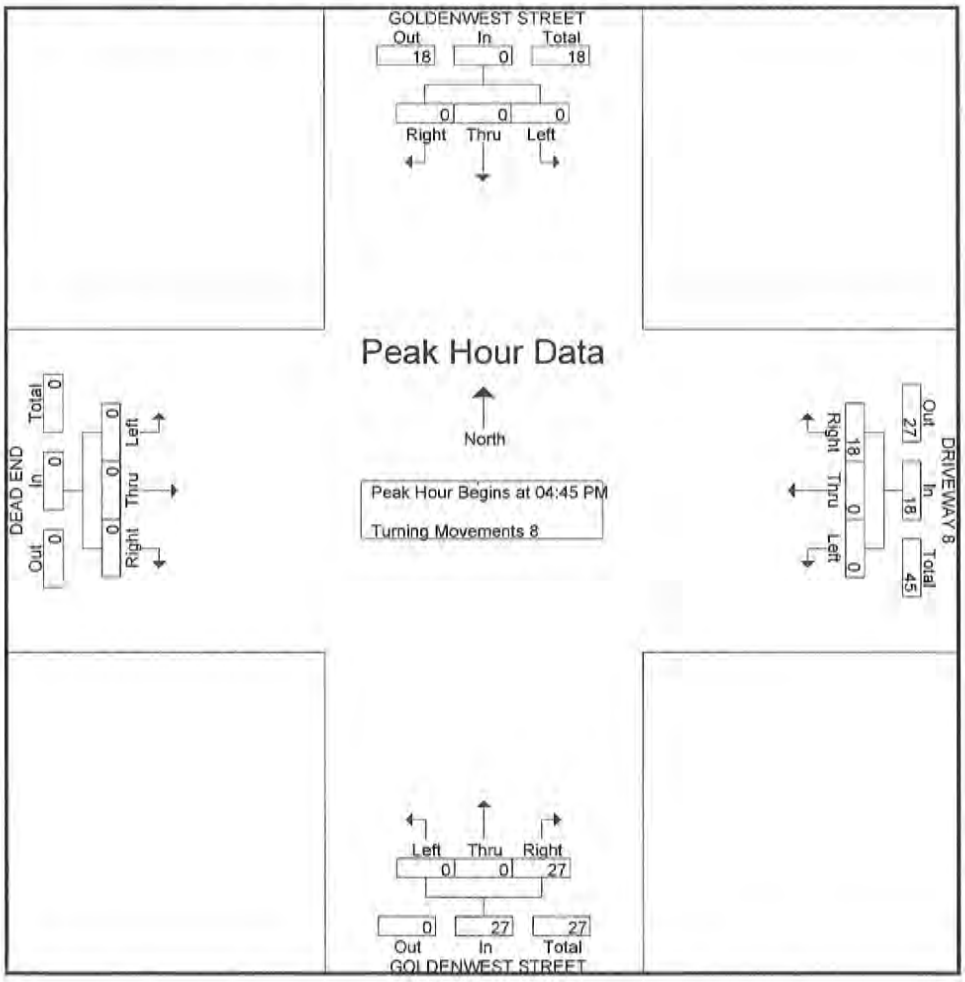


Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOLDENWEST STREET
E-W Direction: DRIVEWAY 8

File Name : H1311038
Site Code : 00005724
Start Date : 10/30/2013
Page No : 3

	GOLDENWEST STREET Southbound				DRIVEWAY 8 Westbound				GOLDENWEST STREET Northbound				DEAD END Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	0	0	7	0	0	7	5	0	0	5	0	0	0	0	12
05:00 PM	0	0	0	0	4	0	0	4	5	0	0	5	0	0	0	0	9
05:15 PM	0	0	0	0	5	0	0	5	6	0	0	6	0	0	0	0	11
05:30 PM	0	0	0	0	2	0	0	2	11	0	0	11	0	0	0	0	13
Total Volume	0	0	0	0	18	0	0	18	27	0	0	27	0	0	0	0	45
% App. Total	0	0	0		100	0	0		100	0	0		0	0	0		
PHF	.000	.000	.000	.000	.643	.000	.000	.643	.614	.000	.000	.614	.000	.000	.000	.000	.865



Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOLDENWEST STREET
E-W Direction: DRIVEWAY 7

File Name : H1311037
Site Code : 00005724
Start Date : 10/30/2013
Page No : 1

Groups Printed- Turning Movements 7

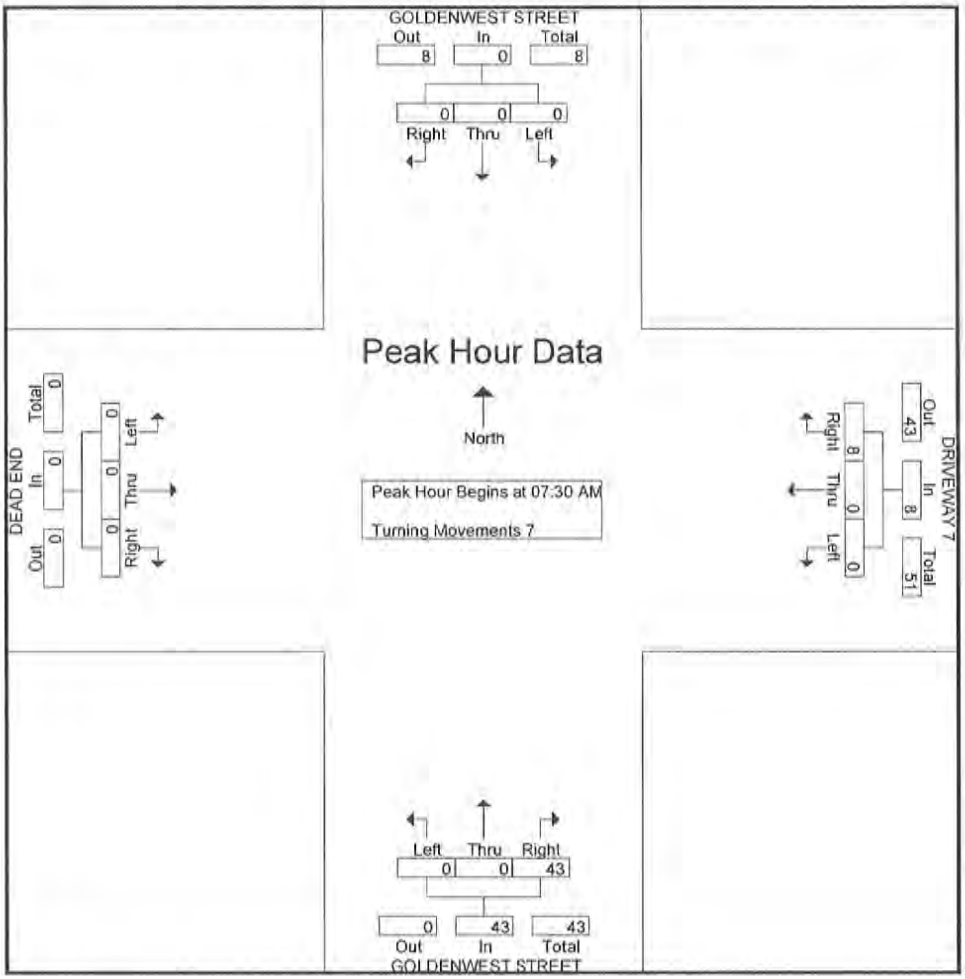
	GOLDENWEST STREET Southbound			DRIVEWAY 7 Westbound			GOLDENWEST STREET Northbound			DEAD END Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
07:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	1
07:15 AM	0	0	0	0	0	0	2	0	0	0	0	0	2
07:30 AM	0	0	0	2	0	0	8	0	0	0	0	0	10
07:45 AM	0	0	0	2	0	0	18	0	0	0	0	0	20
Total	0	0	0	4	0	0	29	0	0	0	0	0	33
08:00 AM	0	0	0	4	0	0	11	0	0	0	0	0	15
08:15 AM	0	0	0	0	0	0	6	0	0	0	0	0	6
08:30 AM	0	0	0	1	0	0	6	0	0	0	0	0	7
08:45 AM	0	0	0	2	0	0	13	0	0	0	0	0	15
Total	0	0	0	7	0	0	36	0	0	0	0	0	43
*** BREAK ***													
04:00 PM	0	0	0	7	0	0	3	0	0	0	0	0	10
04:15 PM	0	0	0	5	0	0	6	0	0	0	0	0	11
04:30 PM	0	0	0	7	0	0	1	0	0	0	0	0	8
04:45 PM	0	0	0	4	0	0	3	0	0	0	0	0	7
Total	0	0	0	23	0	0	13	0	0	0	0	0	36
05:00 PM	0	0	0	10	0	0	6	0	0	0	0	0	16
05:15 PM	0	0	0	6	0	0	3	0	0	0	0	0	9
05:30 PM	0	0	0	3	0	0	4	0	0	0	0	0	7
05:45 PM	0	0	0	1	0	0	6	0	0	0	0	0	7
Total	0	0	0	20	0	0	19	0	0	0	0	0	39
Grand Total	0	0	0	54	0	0	97	0	0	0	0	0	151
Apprch %	0	0	0	100	0	0	100	0	0	0	0	0	
Total %	0	0	0	35.8	0	0	64.2	0	0	0	0	0	

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOLDENWEST STREET
E-W Direction: DRIVEWAY 7

File Name : H1311037
Site Code : 00005724
Start Date : 10/30/2013
Page No : 2

	GOLDENWEST STREET Southbound				DRIVEWAY 7 Westbound				GOLDENWEST STREET Northbound				DEAD END Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	2	0	0	2	8	0	0	8	0	0	0	0	10
07:45 AM	0	0	0	0	2	0	0	2	**18**	0	0	**18**	0	0	0	0	**20**
08:00 AM	0	0	0	0	**4**	0	0	**4**	11	0	0	11	0	0	0	0	15
08:15 AM	0	0	0	0	0	0	0	0	6	0	0	6	0	0	0	0	6
Total Volume	0	0	0	0	8	0	0	8	43	0	0	43	0	0	0	0	51
% App. Total	0	0	0		100	0	0		100	0	0		0	0	0		
PHF	.000	.000	.000	.000	.500	.000	.000	.500	.597	.000	.000	.597	.000	.000	.000	.000	.638

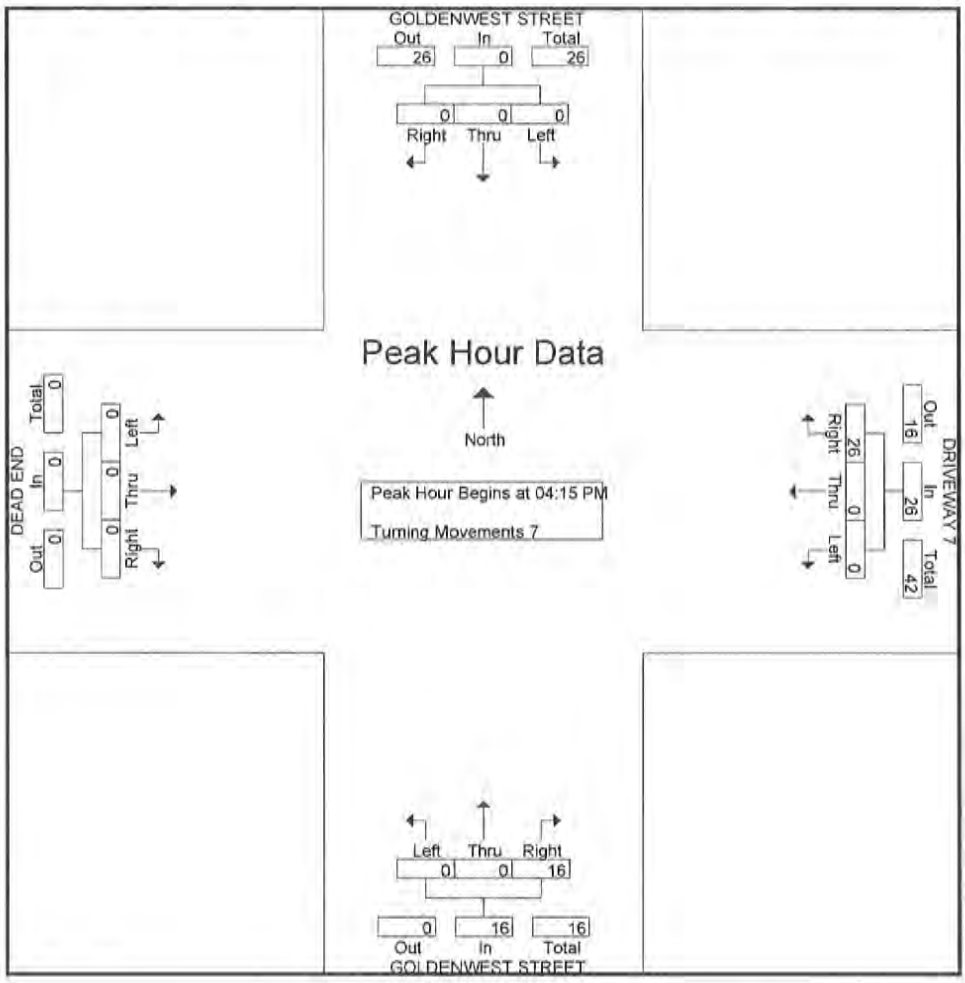


Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOLDENWEST STREET
E-W Direction: DRIVEWAY 7

File Name : H1311037
Site Code : 00005724
Start Date : 10/30/2013
Page No : 3

	GOLDENWEST STREET Southbound				DRIVEWAY 7 Westbound				GOLDENWEST STREET Northbound				DEAD END Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	0	0	0	5	0	0	5	6	0	0	6	0	0	0	0	11
04:30 PM	0	0	0	0	7	0	0	7	1	0	0	1	0	0	0	0	8
04:45 PM	0	0	0	0	4	0	0	4	3	0	0	3	0	0	0	0	7
05:00 PM	0	0	0	0	10	0	0	10	6	0	0	6	0	0	0	0	16
Total Volume	0	0	0	0	26	0	0	26	16	0	0	16	0	0	0	0	42
% App. Total	0	0	0		100	0	0		100	0	0		0	0	0		
PHF	.000	.000	.000	.000	.650	.000	.000	.650	.667	.000	.000	.667	.000	.000	.000	.000	.656



(12)

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOLDENWEST STREET
E-W Direction: EDINGER AVENUE

File Name : H1311102
Site Code : 00000000
Start Date : 11/20/2013
Page No : 1

Groups Printed- Turning Movements

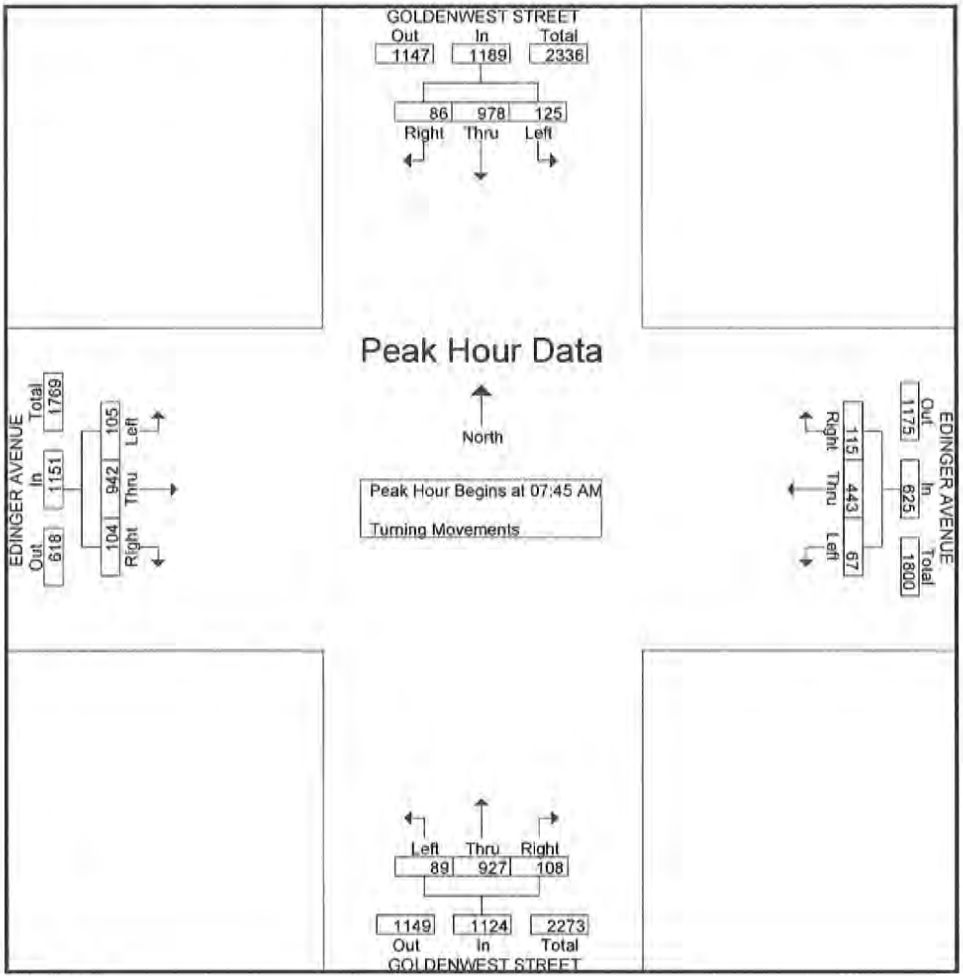
	GOLDENWEST STREET Southbound			EDINGER AVENUE Westbound			GOLDENWEST STREET Northbound			EDINGER AVENUE Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
07:00 AM	19	160	29	14	98	6	18	185	25	11	128	14	707
07:15 AM	16	180	33	26	93	9	22	193	14	18	205	17	826
07:30 AM	30	214	35	20	123	15	23	215	25	31	225	22	978
07:45 AM	21	243	34	32	124	13	28	238	23	30	241	24	1051
Total	86	797	131	92	438	43	91	831	87	90	799	77	3562
08:00 AM	23	250	36	38	102	18	30	230	26	28	226	28	1035
08:15 AM	19	248	32	26	104	25	28	238	22	26	214	31	1013
08:30 AM	23	237	23	19	113	11	22	221	18	20	261	22	990
08:45 AM	18	241	18	12	115	19	25	204	16	15	233	22	938
Total	83	976	109	95	434	73	105	893	82	89	934	103	3976
*** BREAK ***													
04:00 PM	28	238	26	33	142	14	16	243	34	12	216	12	1014
04:15 PM	24	276	29	37	200	18	22	264	28	20	194	16	1128
04:30 PM	32	295	30	36	201	16	31	278	37	22	205	18	1201
04:45 PM	38	324	32	35	232	21	28	310	36	27	228	28	1339
Total	122	1133	117	141	775	69	97	1095	135	81	843	74	4682
05:00 PM	27	278	36	35	251	16	16	297	32	22	194	28	1232
05:15 PM	25	263	38	37	276	24	14	303	34	24	202	24	1264
05:30 PM	31	259	29	31	287	19	18	288	30	28	206	18	1244
05:45 PM	18	263	24	22	217	24	16	291	22	21	187	20	1125
Total	101	1063	127	125	1031	83	64	1179	118	95	789	90	4865
Grand Total	392	3969	484	453	2678	268	357	3998	422	355	3365	344	17085
Apprch %	8.1	81.9	10	13.3	78.8	7.9	7.5	83.7	8.8	8.7	82.8	8.5	
Total %	2.3	23.2	2.8	2.7	15.7	1.6	2.1	23.4	2.5	2.1	19.7	2	

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOLDENWEST STREET
E-W Direction: EDINGER AVENUE

File Name : H1311102
Site Code : 00000000
Start Date : 11/20/2013

	GOLDENWEST STREET Southbound				EDINGER AVENUE Westbound				GOLDENWEST STREET Northbound				EDINGER AVENUE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	21	243	34	298	32	124	13	169	28	238	23	289	30	241	24	295	1051
08:00 AM	23	250	36	309	38	102	18	158	30	230	26	286	28	226	28	282	1035
08:15 AM	19	248	32	299	26	104	25	155	28	238	22	288	26	214	31	271	1013
08:30 AM	23	237	23	283	19	113	11	143	22	221	18	261	20	261	22	303	990
Total Volume	86	978	125	1189	115	443	67	625	108	927	89	1124	104	942	105	1151	4089
% App. Total	7.2	82.3	10.5		18.4	70.9	10.7		9.6	82.5	7.9		9	81.8	9.1		
PHF	.935	.978	.868	.962	.757	.893	.670	.925	.900	.974	.856	.972	.867	.902	.847	.950	.973

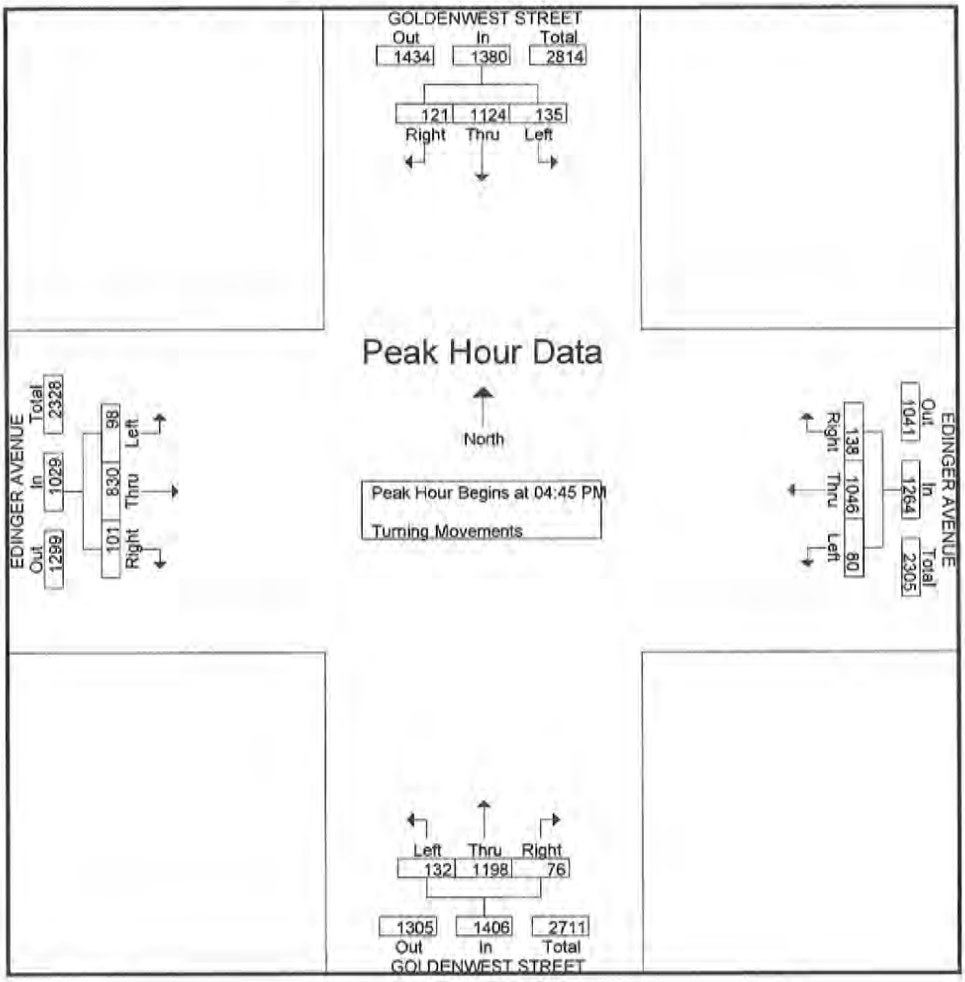


Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOLDENWEST STREET
E-W Direction: EDINGER AVENUE

File Name : H1311102
Site Code : 00000000
Start Date : 11/20/2013
Page No : 3

	GOLDENWEST STREET Southbound				EDINGER AVENUE Westbound				GOLDENWEST STREET Northbound				EDINGER AVENUE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**38**	**324**	32	**394**	35	232	21	288	**28**	**310**	**36**	**374**	27	**228**	**28**	**283**	**1339**
05:00 PM	27	278	36	341	35	251	16	302	16	297	32	345	22	194	28	244	1232
05:15 PM	25	263	**38**	326	**37**	276	**24**	**337**	14	303	34	351	24	202	24	250	1264
05:30 PM	31	259	29	319	31	**287**	19	337	18	288	30	336	**28**	206	18	252	1244
Total Volume	121	1124	135	1380	138	1046	80	1264	76	1198	132	1406	101	830	98	1029	5079
% App. Total	8.8	81.4	9.8		10.9	82.8	6.3		5.4	85.2	9.4		9.8	80.7	9.5		
PHF	.796	.867	.888	.876	.932	.911	.833	.938	.679	.966	.917	.940	.902	.910	.875	.909	.948



(13)

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOLDENWEST STREET
E-W Direction: HEIL AVENUE

File Name : H1311103
Site Code : 00000562
Start Date : 11/20/2013
Page No : 1

Groups Printed- Turning Movements

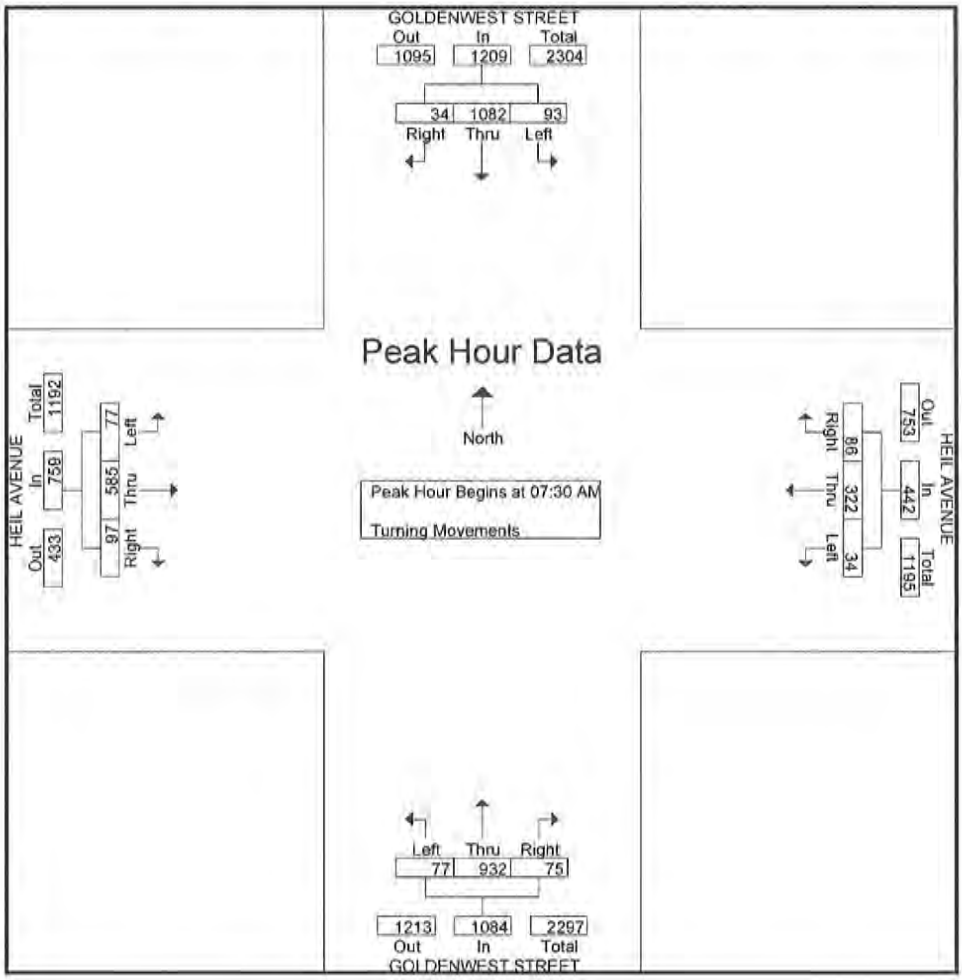
	GOLDENWEST STREET Southbound			HEIL AVENUE Westbound			GOLDENWEST STREET Northbound			HEIL AVENUE Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
07:00 AM	1	171	6	6	27	7	8	154	1	10	96	9	496
07:15 AM	5	166	8	8	31	8	9	191	5	19	111	22	583
07:30 AM	8	236	22	21	54	10	13	193	3	18	124	14	716
07:45 AM	4	285	24	26	112	8	11	282	28	23	117	22	942
Total	18	858	60	61	224	33	41	820	37	70	448	67	2737
08:00 AM	14	331	24	27	92	12	36	238	20	26	182	18	1020
08:15 AM	8	230	23	12	64	4	15	219	26	30	162	23	816
08:30 AM	11	244	22	6	39	8	13	217	13	9	103	15	700
08:45 AM	9	251	17	21	61	12	12	219	13	17	103	13	748
Total	42	1056	86	66	256	36	76	893	72	82	550	69	3284
*** BREAK ***													
04:00 PM	20	299	23	22	91	26	17	291	24	15	102	10	940
04:15 PM	18	281	20	29	128	19	26	220	38	24	93	13	909
04:30 PM	16	283	26	31	112	23	38	310	40	17	129	20	1045
04:45 PM	16	292	25	28	123	38	28	270	19	16	104	30	989
Total	70	1155	94	110	454	106	109	1091	121	72	428	73	3883
05:00 PM	27	291	19	26	114	25	29	285	29	16	109	18	988
05:15 PM	10	229	16	42	149	32	26	302	38	24	105	18	991
05:30 PM	18	304	26	44	110	16	29	309	28	19	102	26	1031
05:45 PM	16	287	25	22	138	29	24	259	23	30	151	18	1022
Total	71	1111	86	134	511	102	108	1155	118	89	467	80	4032
Grand Total	201	4180	326	371	1445	277	334	3959	348	313	1893	289	13936
Apprch %	4.3	88.8	6.9	17.7	69	13.2	7.2	85.3	7.5	12.5	75.9	11.6	
Total %	1.4	30	2.3	2.7	10.4	2	2.4	28.4	2.5	2.2	13.6	2.1	

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA 92780

City: HUNTINGTON BEACH
N-S Direction: GOLDENWEST STREET
E-W Direction: HEIL AVENUE

File Name : H1311103
Site Code : 00000562
Start Date : 11/20/2013
Page No : 2

	GOLDENWEST STREET Southbound				HEIL AVENUE Westbound				GOLDENWEST STREET Northbound				HEIL AVENUE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	8	236	22	266	21	54	10	85	13	193	3	209	18	124	14	156	716
07:45 AM	4	285	**24**	313	26	**112**	8	**146**	11	**282**	**28**	**321**	23	117	22	162	942
08:00 AM	**14**	**331**	24	**369**	**27**	92	**12**	131	**36**	238	20	294	26	**182**	18	**226**	**1020**
08:15 AM	8	230	23	261	12	64	4	80	15	219	26	260	**30**	162	**23**	215	816
Total Volume	34	1082	93	1209	86	322	34	442	75	932	77	1084	97	585	77	759	3494
% App. Total	2.8	89.5	7.7		19.5	72.9	7.7		6.9	86	7.1		12.8	77.1	10.1		
PHF	.607	.817	.969	.819	.796	.719	.708	.757	.521	.826	.688	.844	.808	.804	.837	.840	.856

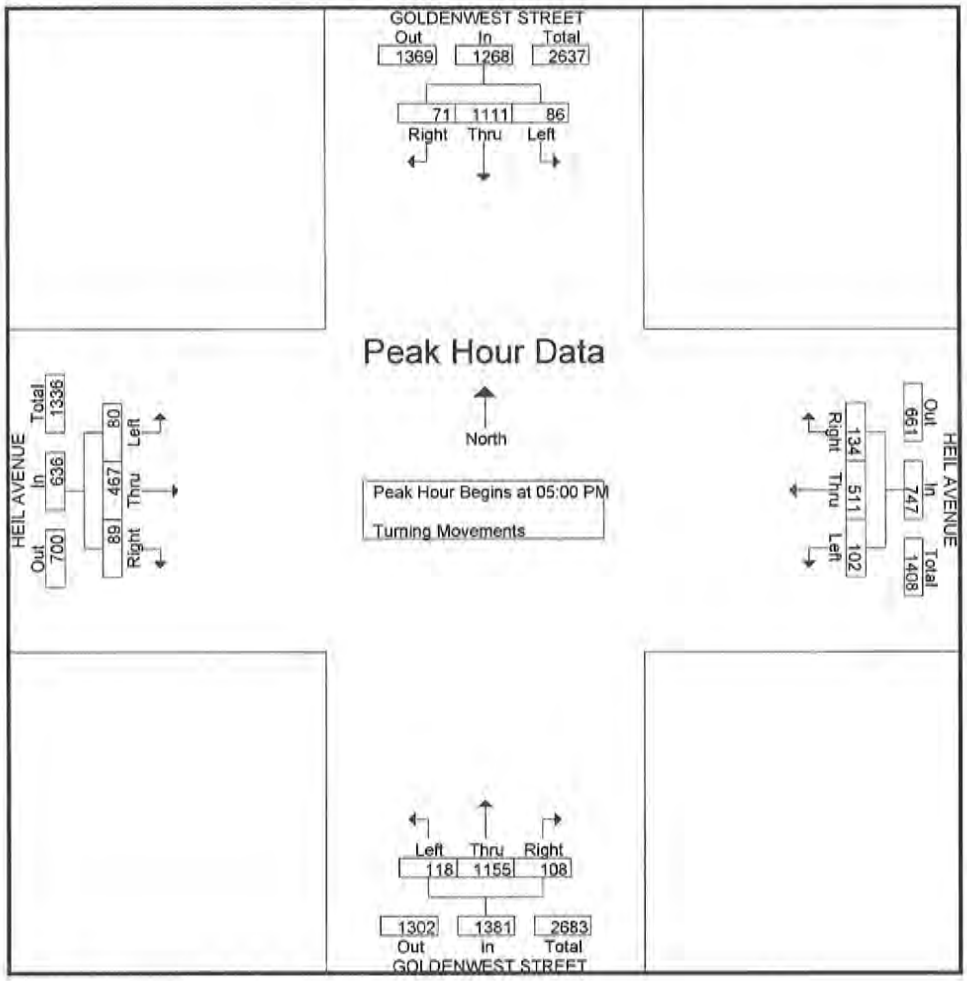


Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOLDENWEST STREET
E-W Direction: HEIL AVENUE

File Name : H1311103
Site Code : 00000562
Start Date : 11/20/2013
Page No : 3

	GOLDENWEST STREET Southbound				HEIL AVENUE Westbound				GOLDENWEST STREET Northbound				HEIL AVENUE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**27**	291	19	337	26	114	25	165	**29**	285	29	343	16	109	18	143	988
05:15 PM	10	229	16	255	42	**149**	**32**	**223**	26	302	**38**	**366**	24	105	18	147	991
05:30 PM	18	**304**	**26**	**348**	**44**	110	16	170	29	**309**	28	366	19	102	**26**	147	1031
05:45 PM	16	287	25	328	22	138	29	189	24	259	23	306	**30**	**151**	18	**199**	1022
Total Volume	71	1111	86	1268	134	511	102	747	108	1155	118	1381	89	467	80	636	4032
% App. Total	5.6	87.6	6.8		17.9	68.4	13.7		7.8	83.6	8.5		14	73.4	12.6		
PHF	.657	.914	.827	.911	.761	.857	.797	.837	.931	.934	.776	.943	.742	.773	.769	.799	.978



(14)

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOLDENWEST COLLEGE
E-W Direction: EDINGER AVENUE

File Name : H1311036
Site Code : 00000000
Start Date : 10/30/2013
Page No : 1

Groups Printed- Turning Movements

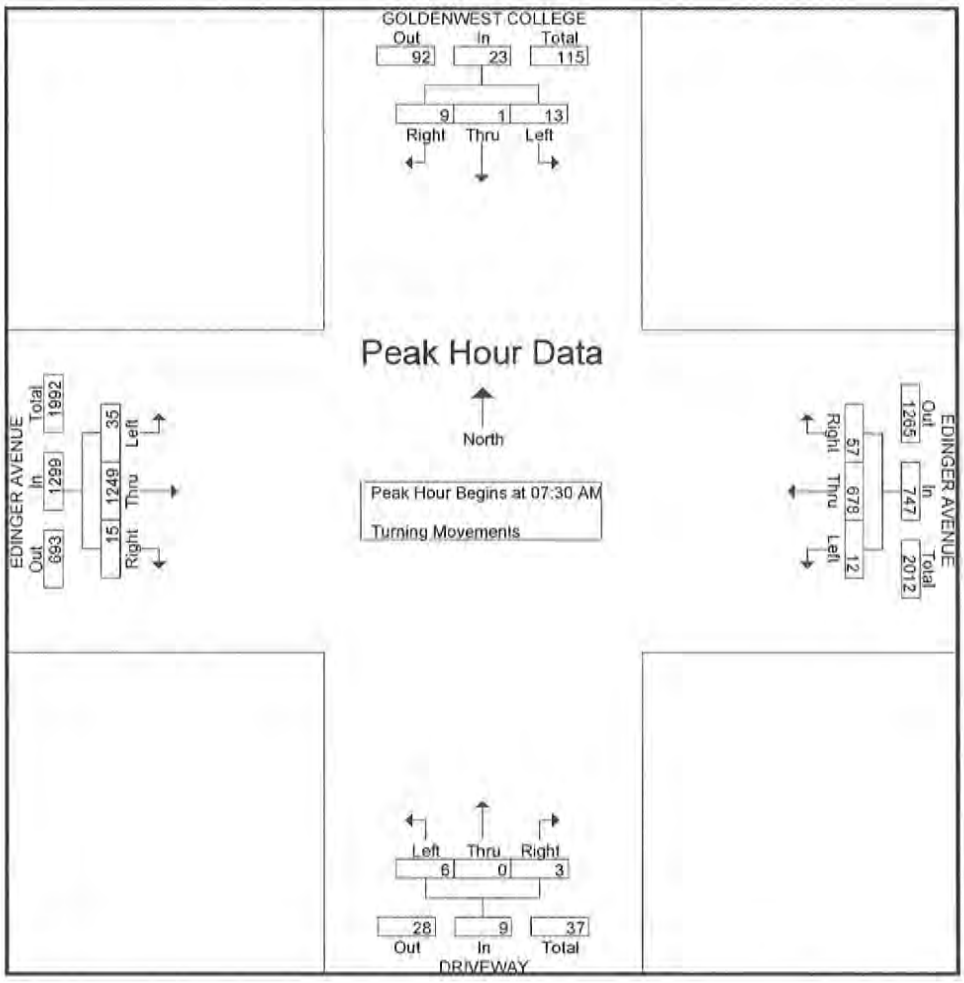
	GOLDENWEST COLLEGE Southbound			EDINGER AVENUE Westbound			DRIVEWAY Northbound			EDINGER AVENUE Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
07:00 AM	0	0	1	1	101	0	3	0	0	0	238	1	345
07:15 AM	0	1	0	4	130	0	0	0	1	1	237	8	382
07:30 AM	4	0	3	15	179	1	0	0	1	5	286	11	505
07:45 AM	1	1	6	24	221	3	2	0	1	5	315	16	595
Total	5	2	10	44	631	4	5	0	3	11	1076	36	1827
08:00 AM	2	0	1	9	142	4	1	0	0	1	367	3	530
08:15 AM	2	0	3	9	136	4	0	0	4	4	281	5	448
08:30 AM	1	0	5	14	132	5	1	1	1	7	247	6	420
08:45 AM	0	0	8	10	127	11	0	0	2	9	257	6	430
Total	5	0	17	42	537	24	2	1	7	21	1152	20	1828
*** BREAK ***													
04:00 PM	9	0	16	8	253	16	7	1	12	13	232	3	570
04:15 PM	9	1	12	11	252	14	12	0	17	12	216	2	558
04:30 PM	7	0	19	6	258	15	2	0	17	8	234	1	567
04:45 PM	6	0	4	16	276	19	7	0	17	14	233	3	595
Total	31	1	51	41	1039	64	28	1	63	47	915	9	2290
05:00 PM	0	2	14	18	305	16	10	0	23	15	241	4	648
05:15 PM	2	0	7	13	303	16	10	0	22	13	230	9	625
05:30 PM	0	1	5	16	290	18	2	1	21	13	255	5	627
05:45 PM	1	0	9	19	253	16	9	0	17	17	229	16	586
Total	3	3	35	66	1151	66	31	1	83	58	955	34	2486
Grand Total	44	6	113	193	3358	158	66	3	156	137	4098	99	8431
Apprch %	27	3.7	69.3	5.2	90.5	4.3	29.3	1.3	69.3	3.2	94.6	2.3	
Total %	0.5	0.1	1.3	2.3	39.8	1.9	0.8	0	1.9	1.6	48.6	1.2	

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOLDENWEST COLLEGE
E-W Direction: EDINGER AVENUE

File Name : H1311036
Site Code : 00000000
Start Date : 10/30/2013
Page No : 2

	GOLDENWEST COLLEGE Southbound				EDINGER AVENUE Westbound				DRIVEWAY Northbound				EDINGER AVENUE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	4	0	3	7	15	179	1	195	0	0	1	1	5	286	11	302	505
07:45 AM	1	1	6	8	24	221	3	248	2	0	1	3	5	315	16	336	595
08:00 AM	2	0	1	3	9	142	4	155	1	0	0	1	1	367	3	371	530
08:15 AM	2	0	3	5	9	136	4	149	0	0	4	4	4	281	5	290	448
Total Volume	9	1	13	23	57	678	12	747	3	0	6	9	15	1249	35	1299	2078
% App. Total	39.1	4.3	56.5		7.6	90.8	1.6		33.3	0	66.7		1.2	96.2	2.7		
PHF	.563	.250	.542	.719	.594	.767	.750	.753	.375	.000	.375	.563	.750	.851	.547	.875	.873

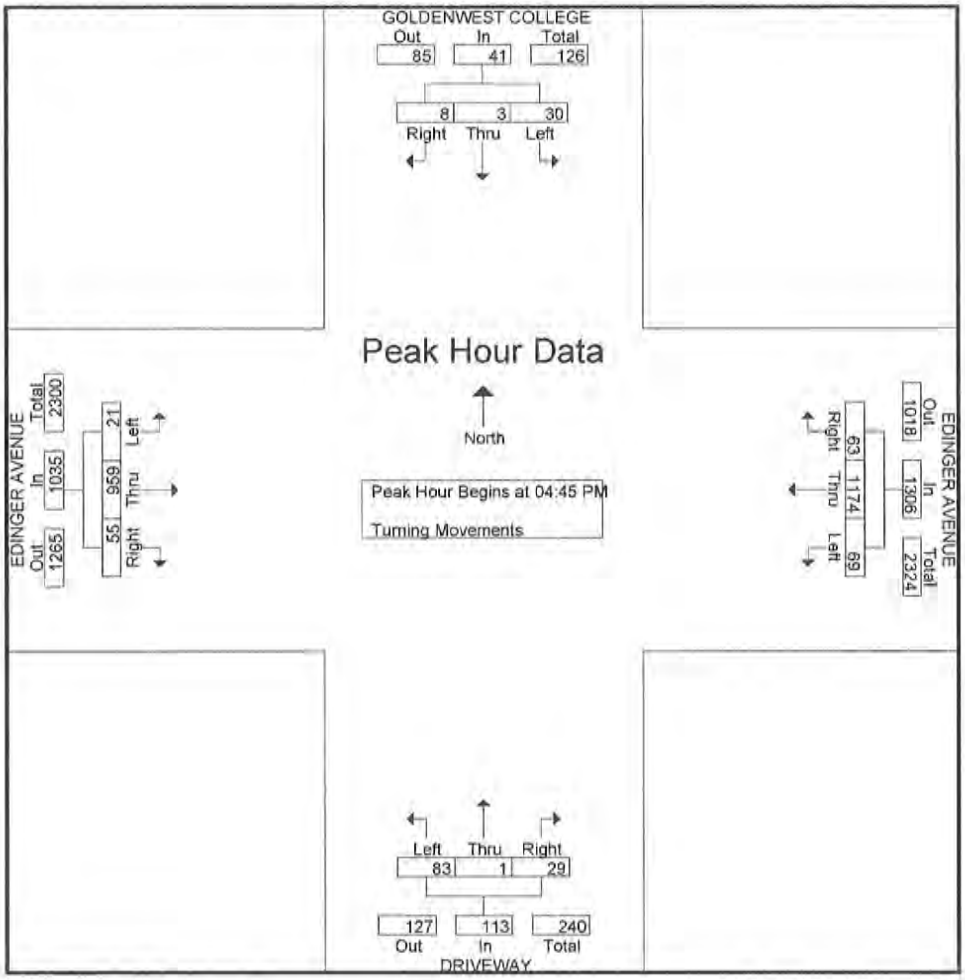


Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOLDENWEST COLLEGE
E-W Direction: EDINGER AVENUE

File Name : H1311036
Site Code : 00000000
Start Date : 10/30/2013
Page No : 3

	GOLDENWEST COLLEGE Southbound				EDINGER AVENUE Westbound				DRIVEWAY Northbound				EDINGER AVENUE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	6	0	4	10	16	276	19	311	7	0	17	24	14	233	3	250	595
05:00 PM	0	2	14	16	18	305	16	339	10	0	23	33	15	241	4	260	648
05:15 PM	2	0	7	9	13	303	16	332	10	0	22	32	13	230	9	252	625
05:30 PM	0	1	5	6	16	290	18	324	2	1	21	24	13	255	5	273	627
Total Volume	8	3	30	41	63	1174	69	1306	29	1	83	113	55	959	21	1035	2495
% App. Total	19.5	7.3	73.2		4.8	89.9	5.3		25.7	0.9	73.5		5.3	92.7	2		
PHF	.333	.375	.536	.641	.875	.962	.908	.963	.725	.250	.902	.856	.917	.940	.583	.948	.963



(15)

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: DRIVEWAY 5
E-W Direction: EDINGER AVENUE

File Name : H1311035
Site Code : 00003873
Start Date : 10/30/2013
Page No : 1

Groups Printed- Turning Movements

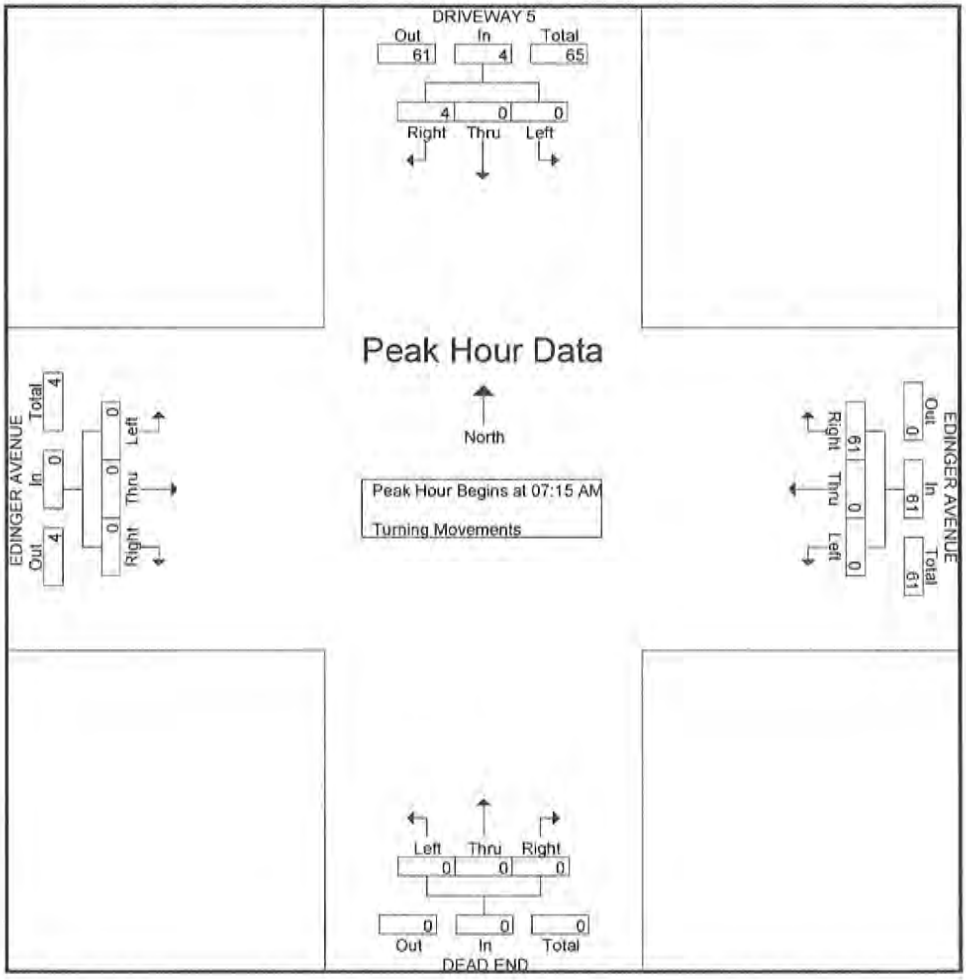
	DRIVEWAY 5 Southbound			EDINGER AVENUE Westbound			DEAD END Northbound			EDINGER AVENUE Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
07:00 AM	0	0	0	2	0	0	0	0	0	0	0	0	2
07:15 AM	0	0	0	5	0	0	0	0	0	0	0	0	5
07:30 AM	0	0	0	15	0	0	0	0	0	0	0	0	15
07:45 AM	2	0	0	29	0	0	0	0	0	0	0	0	31
Total	2	0	0	51	0	0	0	0	0	0	0	0	53
08:00 AM	2	0	0	12	0	0	0	0	0	0	0	0	14
08:15 AM	1	0	0	2	0	0	0	0	0	0	0	0	3
08:30 AM	3	0	0	7	0	0	0	0	0	0	0	0	10
08:45 AM	2	0	0	13	0	0	0	0	0	0	0	0	15
Total	8	0	0	34	0	0	0	0	0	0	0	0	42
*** BREAK ***													
04:00 PM	4	0	0	4	0	0	0	0	0	0	0	0	8
04:15 PM	3	0	0	1	0	0	0	0	0	0	0	0	4
04:30 PM	14	0	0	3	0	0	0	0	0	0	0	0	17
04:45 PM	2	0	0	8	0	0	0	0	0	0	0	0	10
Total	23	0	0	16	0	0	0	0	0	0	0	0	39
05:00 PM	0	0	0	3	0	0	0	0	0	0	0	0	3
05:15 PM	2	0	0	4	0	0	0	0	0	0	0	0	6
05:30 PM	1	0	0	8	0	0	0	0	0	0	0	0	9
05:45 PM	1	0	0	9	0	0	0	0	0	0	0	0	10
Total	4	0	0	24	0	0	0	0	0	0	0	0	28
Grand Total	37	0	0	125	0	0	0	0	0	0	0	0	162
Apprch %	100	0	0	100	0	0	0	0	0	0	0	0	
Total %	22.8	0	0	77.2	0	0	0	0	0	0	0	0	

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: DRIVEWAY 5
E-W Direction: EDINGER AVENUE

File Name : H1311035
Site Code : 00003873
Start Date : 10/30/2013
Page No : 2

	DRIVEWAY 5 Southbound				EDINGER AVENUE Westbound				DEAD END Northbound				EDINGER AVENUE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	5	0	0	5	0	0	0	0	0	0	0	0	5
07:30 AM	0	0	0	0	15	0	0	15	0	0	0	0	0	0	0	0	15
07:45 AM	2	0	0	2	29	0	0	29	0	0	0	0	0	0	0	0	31
08:00 AM	2	0	0	2	12	0	0	12	0	0	0	0	0	0	0	0	14
Total Volume	4	0	0	4	61	0	0	61	0	0	0	0	0	0	0	0	65
% App. Total	100	0	0		100	0	0		0	0	0		0	0	0		
PHF	.500	.000	.000	.500	.526	.000	.000	.526	.000	.000	.000	.000	.000	.000	.000	.000	.524

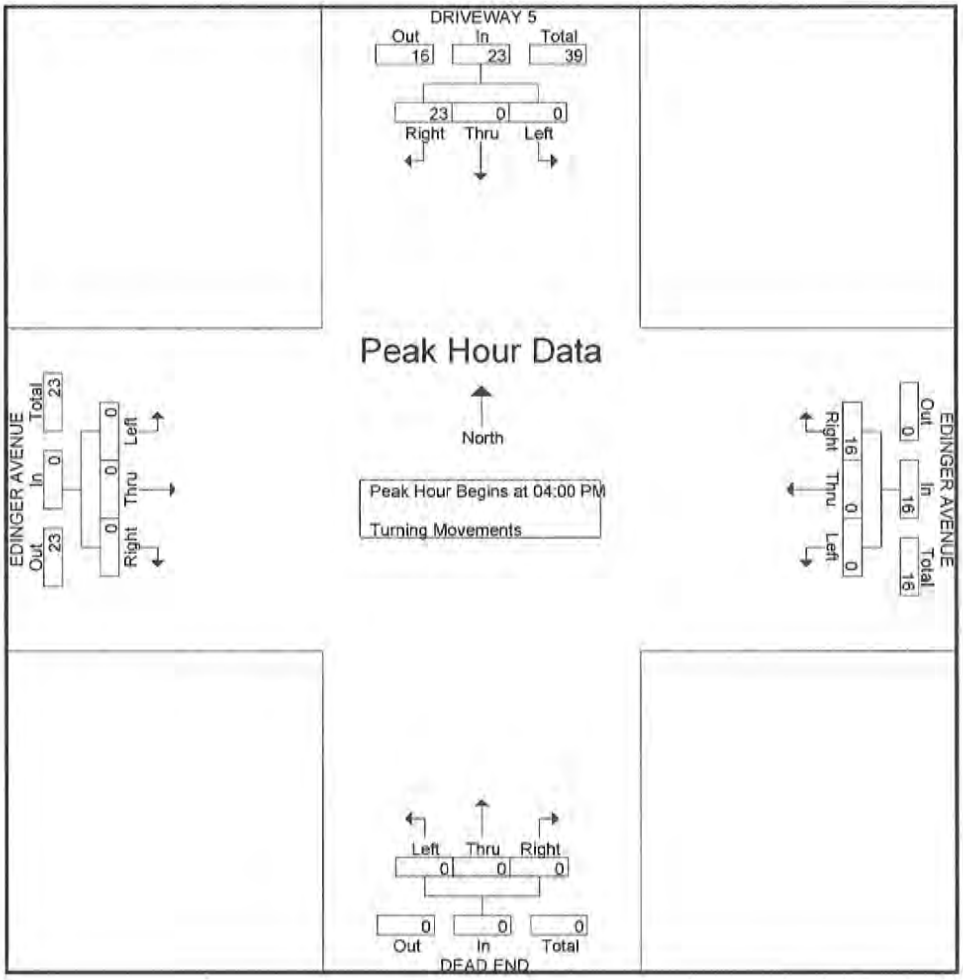


Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: DRIVEWAY 5
E-W Direction: EDINGER AVENUE

File Name : H1311035
Site Code : 00003873
Start Date : 10/30/2013
Page No : 3

	DRIVEWAY 5 Southbound				EDINGER AVENUE Westbound				DEAD END Northbound				EDINGER AVENUE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	4	0	0	4	4	0	0	4	0	0	0	0	0	0	0	0	8
04:15 PM	3	0	0	3	1	0	0	1	0	0	0	0	0	0	0	0	4
04:30 PM	14	0	0	14	3	0	0	3	0	0	0	0	0	0	0	0	17
04:45 PM	2	0	0	2	8	0	0	8	0	0	0	0	0	0	0	0	10
Total Volume	23	0	0	23	16	0	0	16	0	0	0	0	0	0	0	0	39
% App. Total	100	0	0		100	0	0		0	0	0		0	0	0		
PHF	.411	.000	.000	.411	.500	.000	.000	.500	.000	.000	.000	.000	.000	.000	.000	.000	.574



(16)

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: DRIVEWAY 4
E-W Direction: EDINGER AVENUE

File Name : H1311034
Site Code : 00003873
Start Date : 10/30/2013
Page No : 1

Groups Printed- Turning Movements

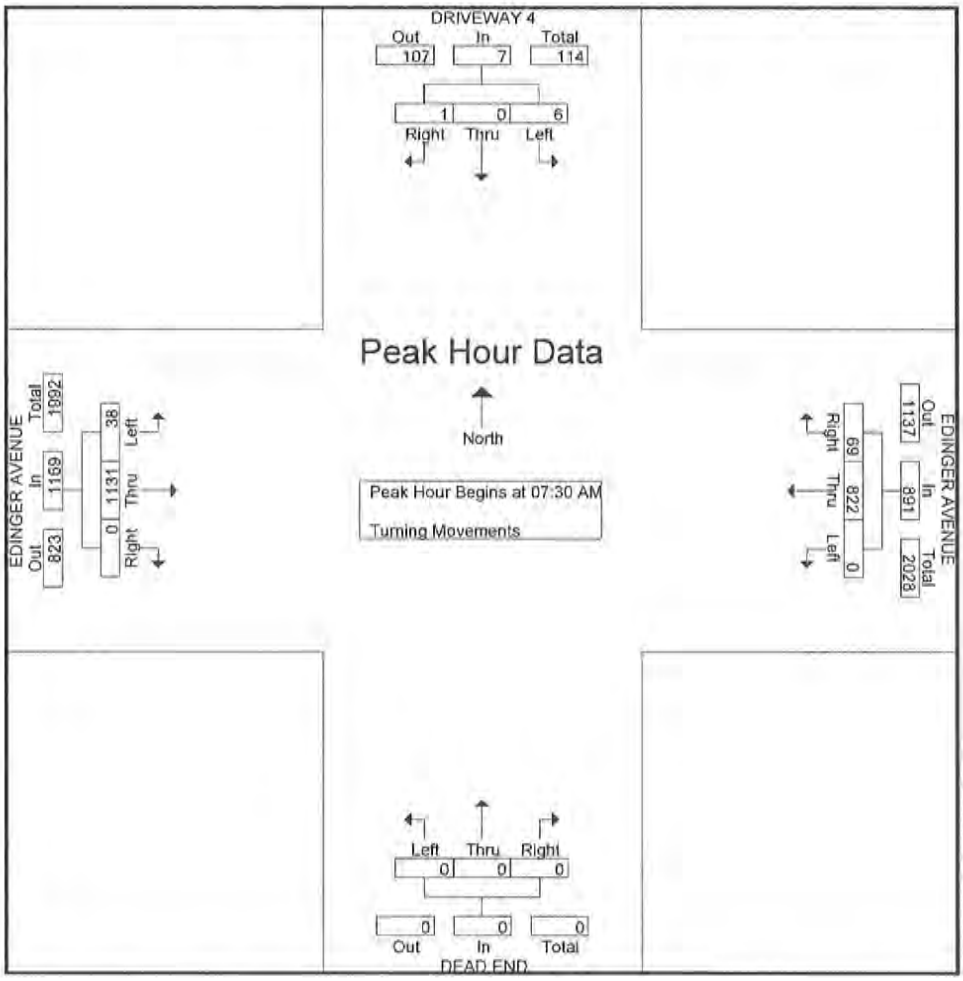
	DRIVEWAY 4 Southbound			EDINGER AVENUE Westbound			DEAD END Northbound			EDINGER AVENUE Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
07:00 AM	0	0	0	2	106	1	0	0	0	0	201	1	311
07:15 AM	0	0	1	5	125	0	0	0	0	0	234	0	365
07:30 AM	0	0	1	14	193	0	0	0	0	0	272	7	487
07:45 AM	1	0	2	40	317	0	0	0	0	0	273	20	653
Total	1	0	4	61	741	1	0	0	0	0	980	28	1816
08:00 AM	0	0	0	9	163	0	0	0	0	0	316	8	496
08:15 AM	0	0	3	6	149	0	0	0	0	0	270	3	431
08:30 AM	1	0	2	18	148	0	0	0	0	0	259	5	433
08:45 AM	3	0	2	16	185	0	0	0	0	0	225	8	439
Total	4	0	7	49	645	0	0	0	0	0	1070	24	1799
*** BREAK ***													
04:00 PM	7	0	10	2	259	0	0	0	0	0	301	3	582
04:15 PM	3	0	15	3	250	0	0	0	0	0	258	1	530
04:30 PM	2	0	0	6	308	0	0	0	0	0	252	0	568
04:45 PM	0	0	2	3	309	0	0	0	0	0	234	2	550
Total	12	0	27	14	1126	0	0	0	0	0	1045	6	2230
05:00 PM	2	0	8	6	347	0	0	0	0	0	284	2	649
05:15 PM	1	0	5	8	328	0	0	0	0	0	272	3	617
05:30 PM	1	0	12	10	324	0	0	0	0	0	271	2	620
05:45 PM	1	0	3	21	312	0	0	0	0	0	234	2	573
Total	5	0	28	45	1311	0	0	0	0	0	1061	9	2459
Grand Total	22	0	66	169	3823	1	0	0	0	0	4156	67	8304
Apprch %	25	0	75	4.2	95.7	0	0	0	0	0	98.4	1.6	
Total %	0.3	0	0.8	2	46	0	0	0	0	0	50	0.8	

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: DRIVEWAY 4
E-W Direction: EDINGER AVENUE

File Name : H1311034
Site Code : 00003873
Start Date : 10/30/2013
Page No : 2

	DRIVEWAY 4 Southbound				EDINGER AVENUE Westbound				DEAD END Northbound				EDINGER AVENUE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	1	1	14	193	0	207	0	0	0	0	0	272	7	279	487
07:45 AM	1	0	2	3	**40**	**317**	0	**357**	0	0	0	0	0	273	**20**	293	**653**
08:00 AM	0	0	0	0	9	163	0	172	0	0	0	0	0	**316**	8	**324**	496
08:15 AM	0	0	**3**	3	6	149	0	155	0	0	0	0	0	270	3	273	431
Total Volume	1	0	6	7	69	822	0	891	0	0	0	0	0	1131	38	1169	2067
% App. Total	14.3	0	85.7		7.7	92.3	0		0	0	0		0	96.7	3.3		
PHF	.250	.000	.500	.583	.431	.648	.000	.624	.000	.000	.000	.000	.000	.895	.475	.902	.791

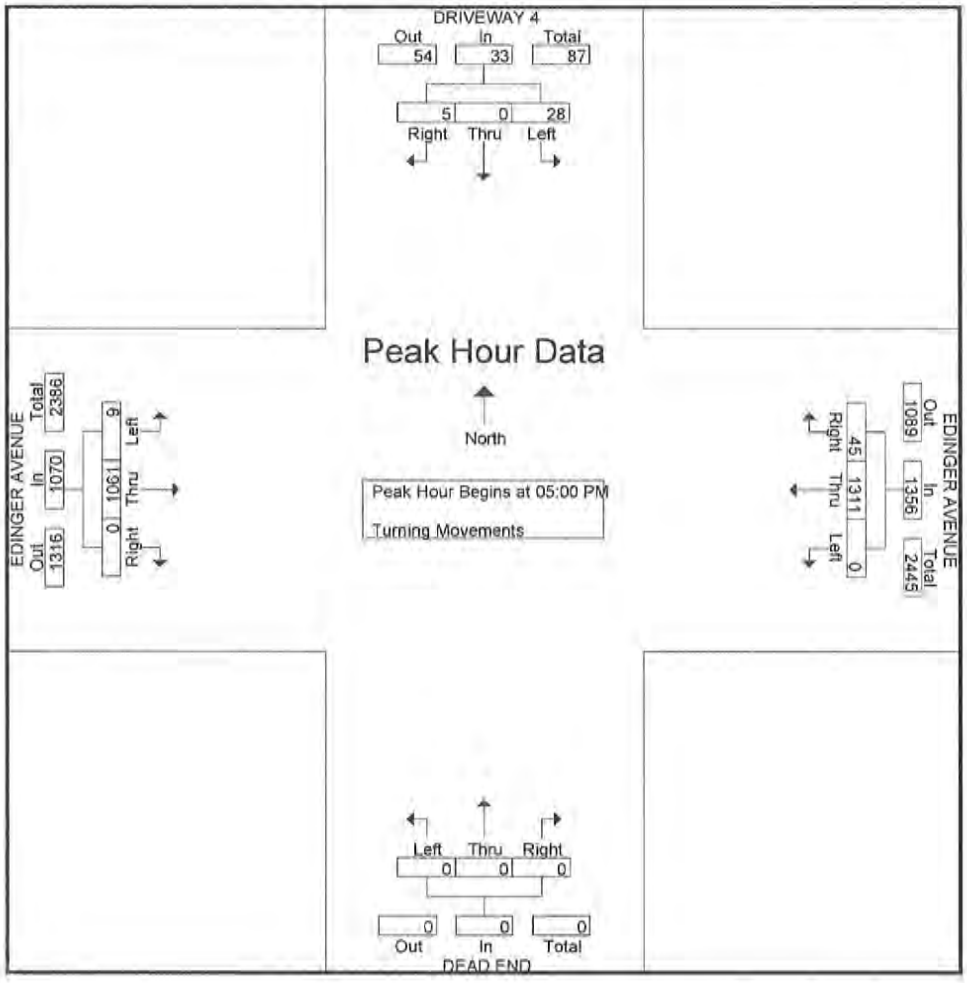


Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA 92780

City: HUNTINGTON BEACH
N-S Direction: DRIVEWAY 4
E-W Direction: EDINGER AVENUE

File Name : H1311034
Site Code : 00003873
Start Date : 10/30/2013
Page No : 3

	DRIVEWAY 4 Southbound				EDINGER AVENUE Westbound				DEAD END Northbound				EDINGER AVENUE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	2	0	8	10	6	347	0	353	0	0	0	0	0	284	2	286	649
05:15 PM	1	0	5	6	8	328	0	336	0	0	0	0	0	272	3	275	617
05:30 PM	1	0	12	13	10	324	0	334	0	0	0	0	0	271	2	273	620
05:45 PM	1	0	3	4	21	312	0	333	0	0	0	0	0	234	2	236	573
Total Volume	5	0	28	33	45	1311	0	1356	0	0	0	0	0	1061	9	1070	2459
% App. Total	15.2	0	84.8		3.3	96.7	0		0	0	0		0	99.2	0.8		
PHF	.625	.000	.583	.635	.536	.945	.000	.960	.000	.000	.000	.000	.000	.934	.750	.935	.947



(15)

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOTHARD STREET
E-W Direction: MCFADDEN AVENUE

File Name : H1311104
Site Code : 00001883
Start Date : 11/20/2013
Page No : 1

Groups Printed- Turning Movements

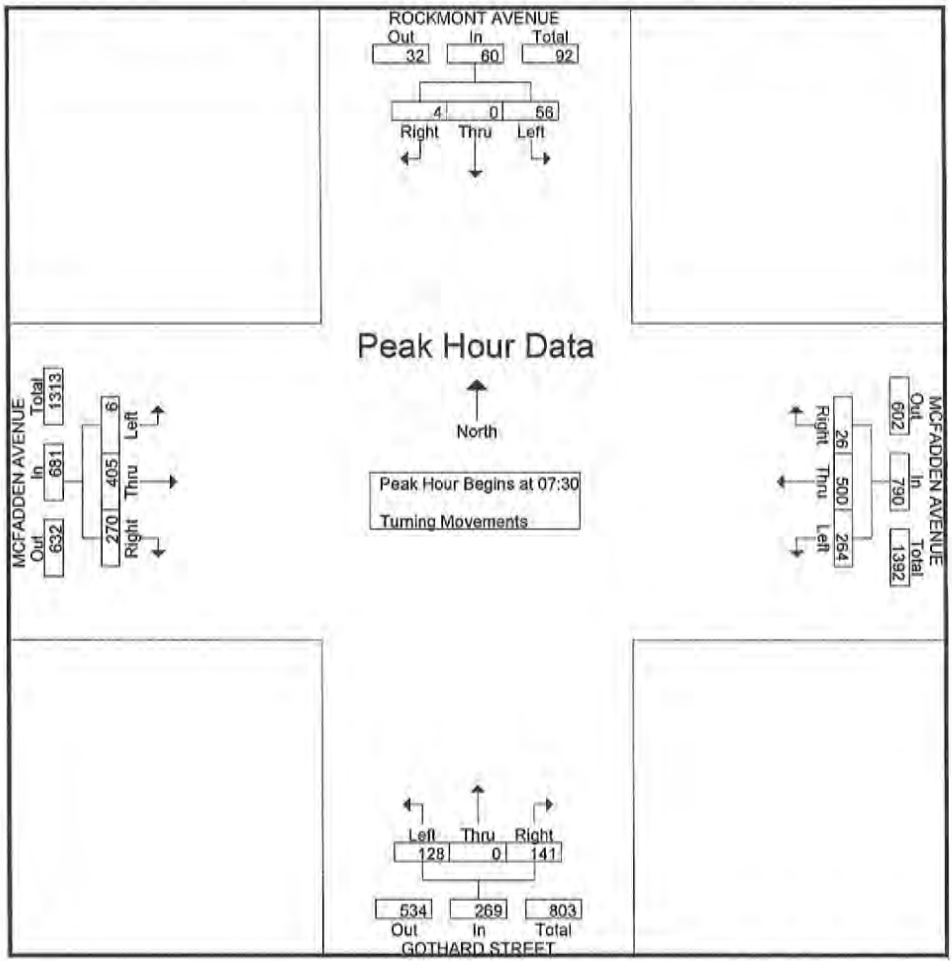
	ROCKMONT AVENUE Southbound			MCFADDEN AVENUE Westbound			GOTHARD STREET Northbound			MCFADDEN AVENUE Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
07:00	1	0	8	3	60	25	30	0	19	34	57	0	237
07:15	1	0	9	5	74	27	23	0	34	58	78	1	310
07:30	0	0	15	5	109	68	25	0	39	59	76	1	397
07:45	3	0	18	6	142	81	43	0	41	83	119	2	538
Total	5	0	50	19	385	201	121	0	133	234	330	4	1482
08:00	0	0	11	10	148	76	33	0	23	61	108	2	472
08:15	1	0	12	5	101	39	40	0	25	67	102	1	393
08:30	2	0	16	7	98	53	30	0	32	51	91	1	381
08:45	1	0	4	3	110	59	21	0	26	60	93	0	377
Total	4	0	43	25	457	227	124	0	106	239	394	4	1623
*** BREAK ***													
16:00	1	0	12	9	118	27	74	0	95	63	125	0	524
16:15	0	0	11	6	104	36	70	0	98	72	124	0	521
16:30	2	0	3	10	137	50	84	0	103	74	140	2	605
16:45	2	0	13	14	142	39	87	0	101	74	148	2	622
Total	5	0	39	39	501	152	315	0	397	283	537	4	2272
17:00	0	0	10	13	135	54	92	0	115	72	129	1	621
17:15	0	0	12	14	131	27	141	0	131	99	155	0	710
17:30	1	0	7	15	159	51	63	0	87	90	120	0	593
17:45	1	0	13	14	168	51	98	0	124	85	129	1	684
Total	2	0	42	56	593	183	394	0	457	346	533	2	2608
Grand Total	16	0	174	139	1936	763	954	0	1093	1102	1794	14	7985
Apprch %	8.4	0	91.6	4.9	68.2	26.9	46.6	0	53.4	37.9	61.6	0.5	
Total %	0.2	0	2.2	1.7	24.2	9.6	11.9	0	13.7	13.8	22.5	0.2	

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOTHARD STREET
E-W Direction: MCFADDEN AVENUE

File Name : H1311104
Site Code : 00001883
Start Date : 11/20/2013
Page No : 2

	ROCKMONT AVENUE Southbound				MCFADDEN AVENUE Westbound				GOTHARD STREET Northbound				MCFADDEN AVENUE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30																	
07:30	0	0	15	15	5	109	68	182	25	0	39	64	59	76	1	136	397
07:45	3	0	18	21	6	142	81	229	43	0	41	84	83	119	2	204	538
08:00	0	0	11	11	10	148	76	234	33	0	23	56	61	108	2	171	472
08:15	1	0	12	13	5	101	39	145	40	0	25	65	67	102	1	170	393
Total Volume	4	0	56	60	26	500	264	790	141	0	128	269	270	405	6	681	1800
% App. Total	6.7	0	93.3		3.3	63.3	33.4		52.4	0	47.6		39.6	59.5	0.9		
PHF	.333	.000	.778	.714	.650	.845	.815	.844	.820	.000	.780	.801	.813	.851	.750	.835	.836

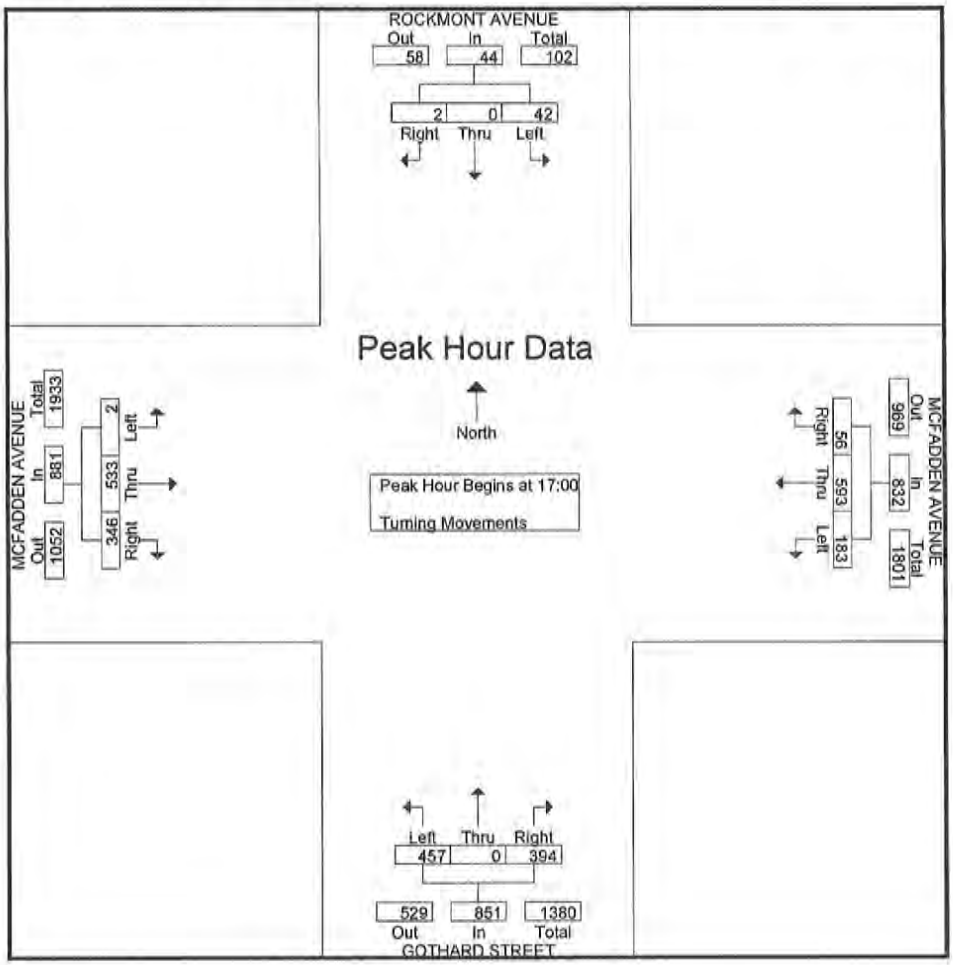


Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOTHARD STREET
E-W Direction: MCFADDEN AVENUE

File Name : H1311104
Site Code : 00001883
Start Date : 11/20/2013
Page No : 3

	ROCKMONT AVENUE Southbound				MCFADDEN AVENUE Westbound				GOTHARD STREET Northbound				MCFADDEN AVENUE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 17:00																	
17:00	0	0	10	10	13	135	54	202	92	0	115	207	72	129	1	202	621
17:15	0	0	12	12	14	131	27	172	**141**	0	**131**	**272**	**99**	**155**	0	**254**	**710**
17:30	1	0	7	8	**15**	159	51	225	63	0	87	150	90	120	0	210	593
17:45	1	0	**13**	**14**	14	**168**	51	**233**	98	0	124	222	85	129	1	215	684
Total Volume	2	0	42	44	56	593	183	832	394	0	457	851	346	533	2	881	2608
% App. Total	4.5	0	95.5		6.7	71.3	22		46.3	0	53.7		39.3	60.5	0.2		
PHF	.500	.000	.808	.786	.933	.882	.847	.893	.699	.000	.872	.782	.874	.860	.500	.867	.918



(48)

Transportation Studies, Inc
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOTHARD STREET
E-W Direction: DRIVEWAY 1

File Name : H1311031
Site Code : 00000000
Start Date : 10/30/2013
Page No : 1

Groups Printed- Turning Movements

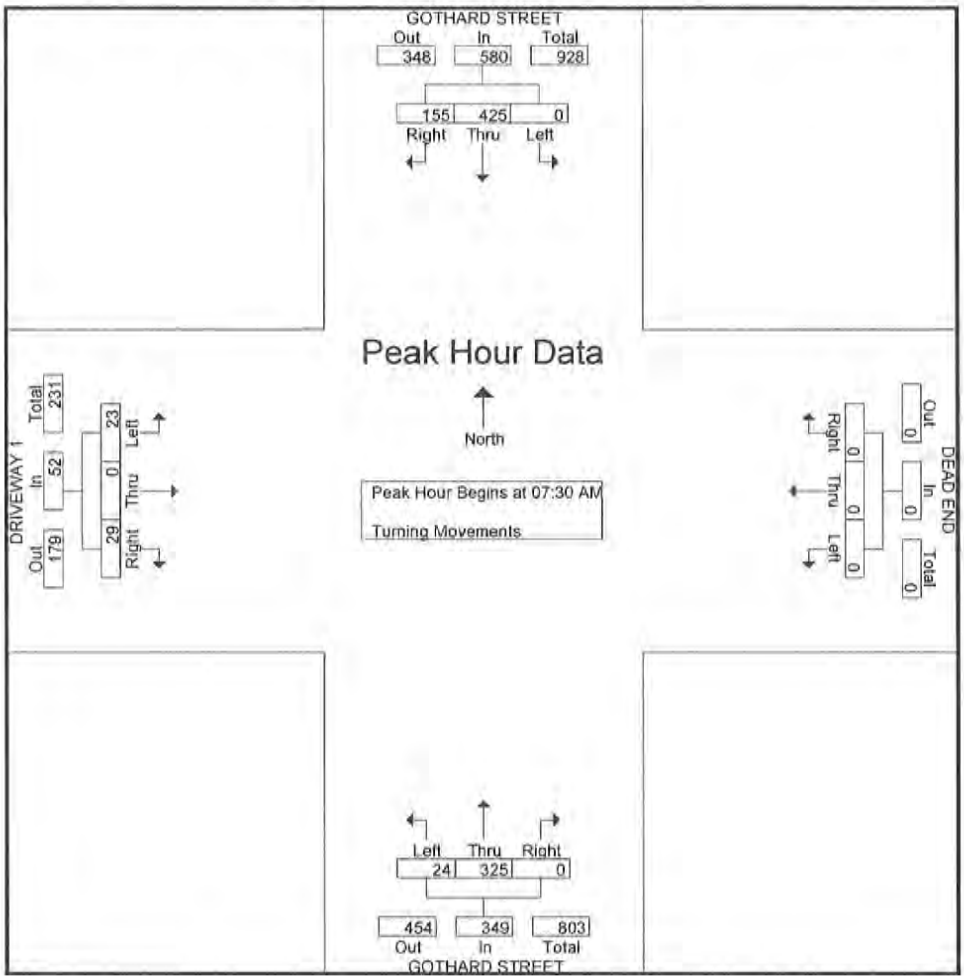
	GOTHARD STREET Southbound			DEAD END Westbound			GOTHARD STREET Northbound			DRIVEWAY 1 Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
07:00 AM	11	50	0	0	0	0	0	73	4	6	0	3	147
07:15 AM	12	81	0	0	0	0	0	68	7	9	0	9	186
07:30 AM	42	100	0	0	0	0	0	73	6	7	0	4	232
07:45 AM	61	126	0	0	0	0	0	95	8	6	0	7	303
Total	126	357	0	0	0	0	0	309	25	28	0	23	868
08:00 AM	30	104	0	0	0	0	0	80	5	6	0	5	230
08:15 AM	22	95	0	0	0	0	0	77	5	10	0	7	216
08:30 AM	20	89	0	0	0	0	0	78	4	6	0	2	199
08:45 AM	44	101	0	0	0	0	0	68	8	3	0	5	229
Total	116	389	0	0	0	0	0	303	22	25	0	19	874
*** BREAK ***													
04:00 PM	7	94	0	0	0	0	0	152	0	22	0	37	312
04:15 PM	13	91	0	0	0	0	0	158	0	10	0	11	283
04:30 PM	14	89	0	0	0	0	0	193	1	28	0	41	366
04:45 PM	8	98	0	0	0	0	0	181	0	12	0	11	310
Total	42	372	0	0	0	0	0	684	1	72	0	100	1271
05:00 PM	10	111	0	0	0	0	0	206	6	14	0	27	374
05:15 PM	16	112	0	0	0	0	0	185	4	13	0	11	341
05:30 PM	14	107	0	0	0	0	0	174	7	19	0	15	336
05:45 PM	21	110	0	0	0	0	0	175	3	7	0	12	328
Total	61	440	0	0	0	0	0	740	20	53	0	65	1379
Grand Total	345	1558	0	0	0	0	0	2036	68	178	0	207	4392
Apprch %	18.1	81.9	0	0	0	0	0	96.8	3.2	46.2	0	53.8	
Total %	7.9	35.5	0	0	0	0	0	46.4	1.5	4.1	0	4.7	

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOTHARD STREET
E-W Direction: DRIVEWAY 1

File Name : H1311031
Site Code : 00000000
Start Date : 10/30/2013
Page No : 2

	GOTHARD STREET Southbound				DEAD END Westbound				GOTHARD STREET Northbound				DRIVEWAY 1 Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	42	100	0	142	0	0	0	0	0	73	6	79	7	0	4	11	232
07:45 AM	**61**	**126**	0	**187**	0	0	0	0	0	**95**	**8**	**103**	6	0	7	13	**303**
08:00 AM	30	104	0	134	0	0	0	0	0	80	5	85	6	0	5	11	230
08:15 AM	22	95	0	117	0	0	0	0	0	77	5	82	**10**	0	7	**17**	216
Total Volume	155	425	0	580	0	0	0	0	0	325	24	349	29	0	23	52	981
% App. Total	26.7	73.3	0		0	0	0		0	93.1	6.9		55.8	0	44.2		
PHF	.635	.843	.000	.775	.000	.000	.000	.000	.000	.855	.750	.847	.725	.000	.821	.765	.809

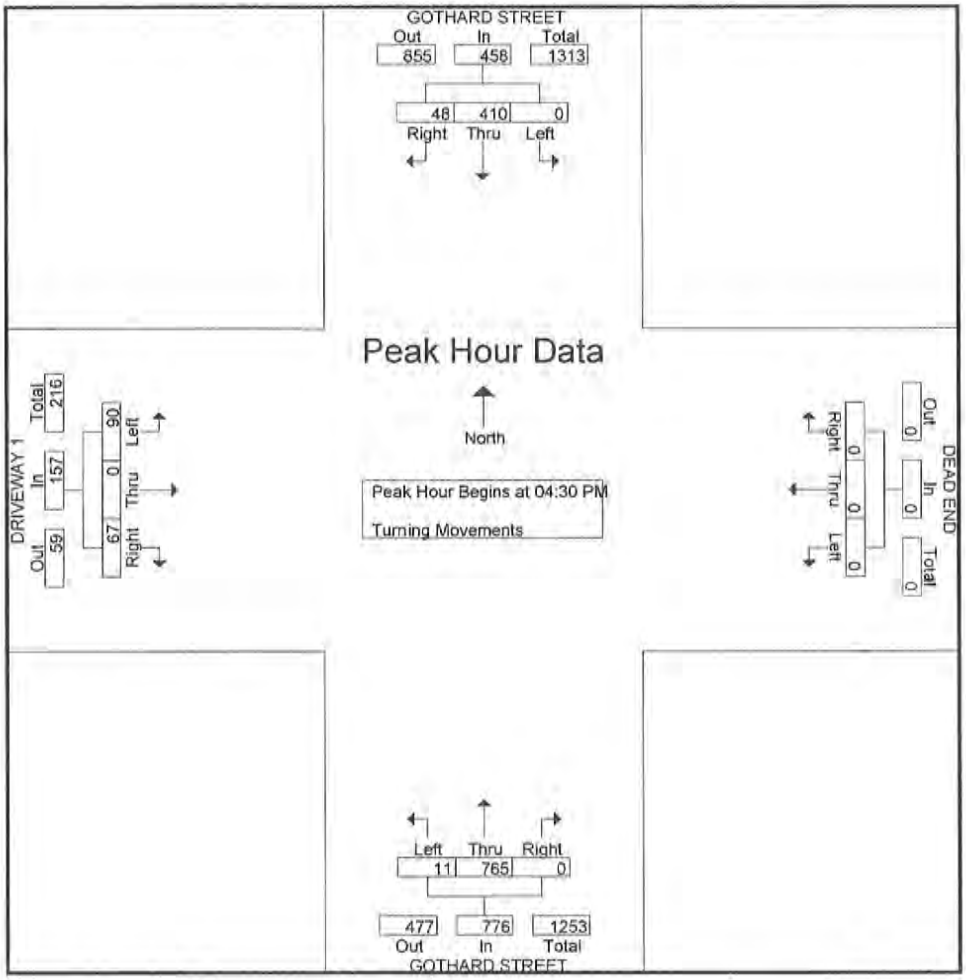


Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOTHARD STREET
E-W Direction: DRIVEWAY 1

File Name : H1311031
Site Code : 00000000
Start Date : 10/30/2013
Page No : 3

	GOTHARD STREET Southbound				DEAD END Westbound				GOTHARD STREET Northbound				DRIVEWAY 1 Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	14	89	0	103	0	0	0	0	0	193	1	194	28	0	41	69	366
04:45 PM	8	98	0	106	0	0	0	0	0	181	0	181	12	0	11	23	310
05:00 PM	10	111	0	121	0	0	0	0	0	206	6	212	14	0	27	41	374
05:15 PM	16	112	0	128	0	0	0	0	0	185	4	189	13	0	11	24	341
Total Volume	48	410	0	458	0	0	0	0	0	765	11	776	67	0	90	157	1391
% App. Total	10.5	89.5	0		0	0	0		0	98.6	1.4		42.7	0	57.3		
PHF	.750	.915	.000	.895	.000	.000	.000	.000	.000	.928	.458	.915	.598	.000	.549	.569	.930



(19)

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOTHARD STREET
E-W Direction: CENTER STREET

File Name : H1311032
Site Code : 00005163
Start Date : 10/30/2013
Page No : 1

Groups Printed- Turning Movements

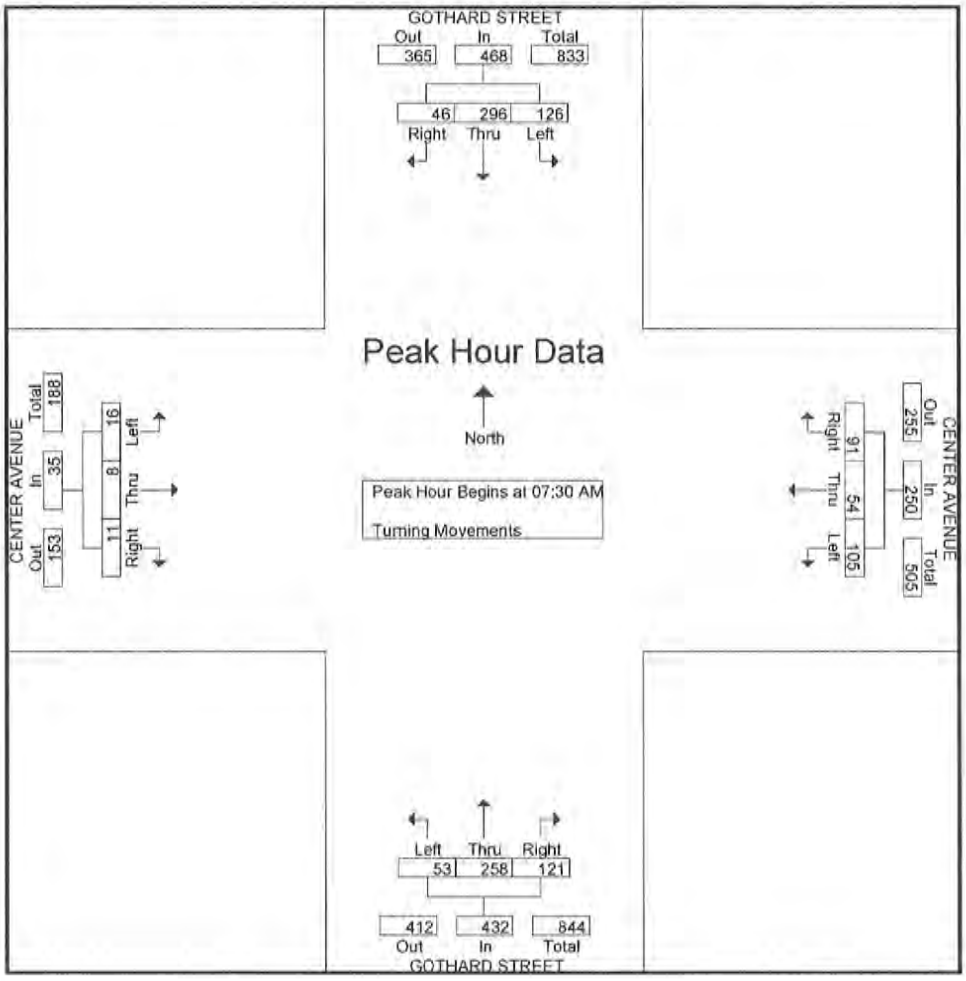
	GOTHARD STREET Southbound			CENTER AVENUE Westbound			GOTHARD STREET Northbound			CENTER AVENUE Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
07:00 AM	2	35	23	14	3	17	26	56	3	1	0	0	180
07:15 AM	2	56	35	17	5	22	21	66	6	2	1	1	234
07:30 AM	8	68	26	18	17	25	23	62	15	3	0	0	265
07:45 AM	14	79	38	19	25	36	33	74	30	4	4	8	364
Total	26	238	122	68	50	100	103	258	54	10	5	9	1043
08:00 AM	19	81	33	25	8	20	31	71	4	3	1	4	300
08:15 AM	5	68	29	29	4	24	34	51	4	1	3	4	256
08:30 AM	6	66	27	19	7	13	29	50	11	3	1	2	234
08:45 AM	7	48	23	17	7	35	26	49	12	4	4	2	234
Total	37	263	112	90	26	92	120	221	31	11	9	12	1024
*** BREAK ***													
04:00 PM	2	65	32	50	10	86	42	101	3	3	12	3	409
04:15 PM	0	68	50	54	2	74	52	117	5	3	11	4	440
04:30 PM	2	74	51	54	7	98	56	95	4	13	13	5	472
04:45 PM	1	67	34	75	21	108	54	127	1	11	13	2	514
Total	5	274	167	233	40	366	204	440	13	30	49	14	1835
05:00 PM	3	71	41	88	7	89	60	112	2	7	12	14	506
05:15 PM	1	56	52	69	8	102	62	146	3	5	12	7	523
05:30 PM	6	50	48	47	10	86	49	111	13	1	7	4	432
05:45 PM	5	80	34	54	5	80	40	104	18	9	5	8	442
Total	15	257	175	258	30	357	211	473	36	22	36	33	1903
Grand Total	83	1032	576	649	146	915	638	1392	134	73	99	68	5805
Apprch %	4.9	61	34.1	38	8.5	53.5	29.5	64.3	6.2	30.4	41.2	28.3	
Total %	1.4	17.8	9.9	11.2	2.5	15.8	11	24	2.3	1.3	1.7	1.2	

Transportation Studies, Inc
2640 Walnut Avenue, Suite H
Tustin, CA 92780

City: HUNTINGTON BEACH
N-S Direction: GOTHARD STREET
E-W Direction: CENTER STREET

File Name : H1311032
Site Code : 00005163
Start Date : 10/30/2013
Page No : 2

	GOTHARD STREET Southbound				CENTER AVENUE Westbound				GOTHARD STREET Northbound				CENTER AVENUE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	8	68	26	102	18	17	25	60	23	62	15	100	3	0	0	3	265
07:45 AM	14	79	38	131	19	25	36	80	33	74	30	137	4	4	8	16	364
08:00 AM	19	81	33	133	25	8	20	53	31	71	4	106	3	1	4	8	300
08:15 AM	5	68	29	102	29	4	24	57	34	51	4	89	1	3	4	8	256
Total Volume	46	296	126	468	91	54	105	250	121	258	53	432	11	8	16	35	1185
% App. Total	9.8	63.2	26.9		36.4	21.6	42		28	59.7	12.3		31.4	22.9	45.7		
PHF	.605	.914	.829	.880	.784	.540	.729	.781	.890	.872	.442	.788	.688	.500	.500	.547	.814

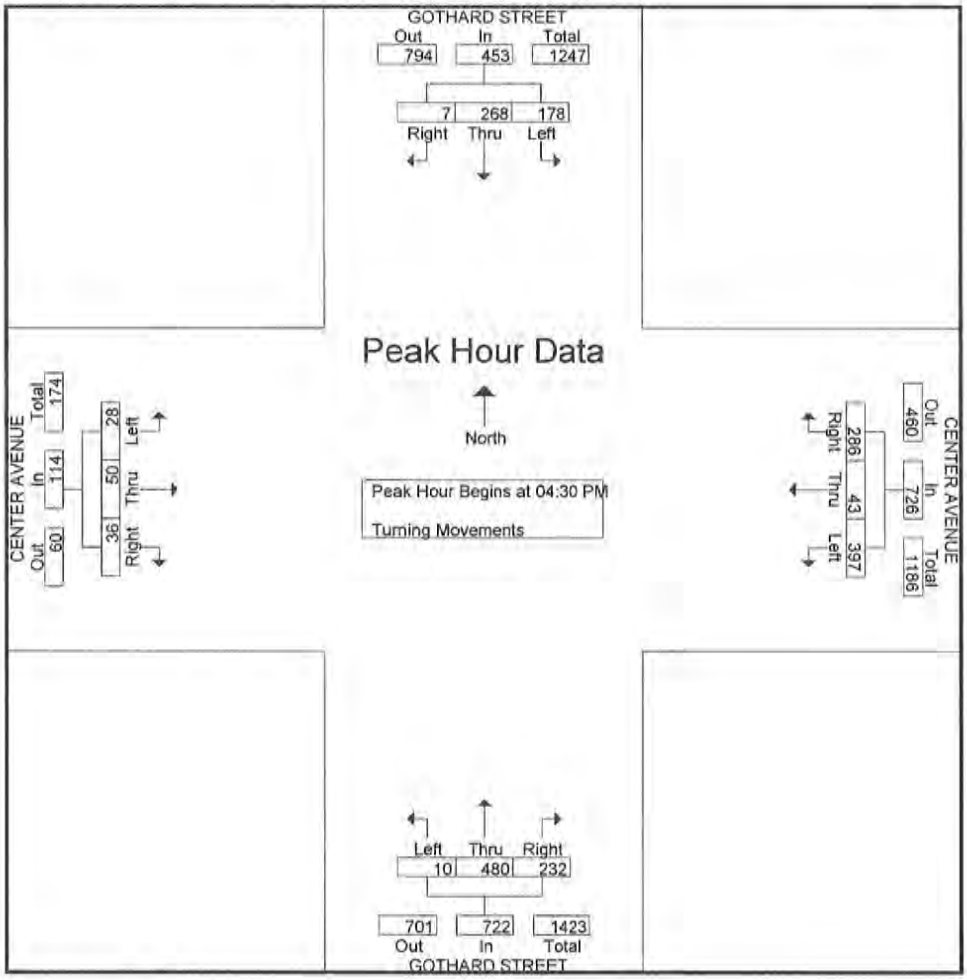


Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOTHARD STREET
E-W Direction: CENTER STREET

File Name : H1311032
Site Code : 00005163
Start Date : 10/30/2013
Page No : 3

	GOTHARD STREET Southbound				CENTER AVENUE Westbound				GOTHARD STREET Northbound				CENTER AVENUE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	2	**74**	51	**127**	54	7	98	159	56	95	**4**	155	**13**	**13**	5	31	472
04:45 PM	1	67	34	102	75	**21**	**108**	**204**	54	127	1	182	11	13	2	26	514
05:00 PM	**3**	71	41	115	**88**	7	89	184	60	112	2	174	7	12	**14**	**33**	506
05:15 PM	1	56	**52**	109	69	8	102	179	**62**	**146**	3	**211**	5	12	7	24	**523**
Total Volume	7	268	178	453	286	43	397	726	232	480	10	722	36	50	28	114	2015
% App. Total	1.5	59.2	39.3		39.4	5.9	54.7		32.1	66.5	1.4		31.6	43.9	24.6		
PHF	.583	.905	.856	.892	.813	.512	.919	.890	.935	.822	.625	.855	.692	.962	.500	.864	.963



(20)

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOTHARD STREET
E-W Direction: DRIVEWAY 3

File Name : H1311033
Site Code : 00000562
Start Date : 10/30/2013
Page No : 1

Groups Printed- Turning Movements

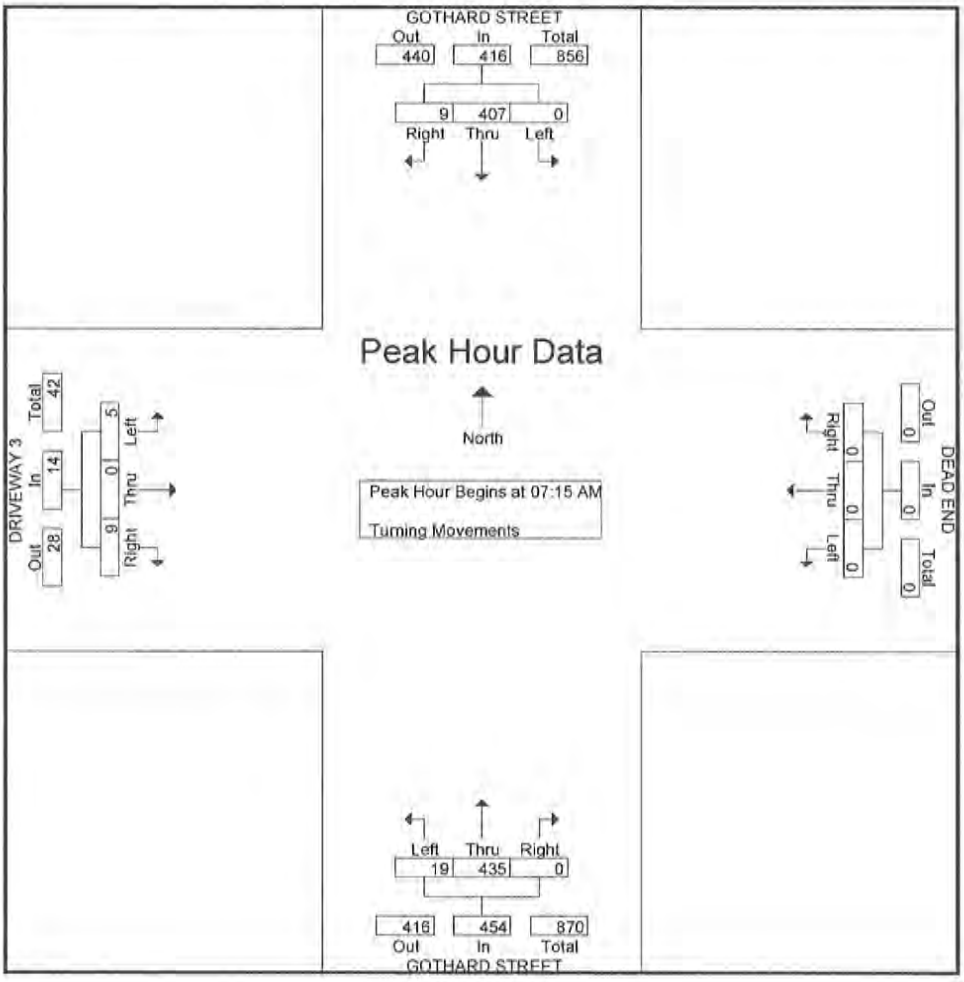
	GOTHARD STREET Southbound			DEAD END Westbound			GOTHARD STREET Northbound			DRIVEWAY 3 Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
07:00 AM	0	53	0	0	0	0	0	89	0	0	0	0	142
07:15 AM	3	85	0	0	0	0	0	100	3	1	0	2	194
07:30 AM	2	91	0	0	0	0	0	104	3	1	0	3	204
07:45 AM	2	108	0	0	0	0	0	118	12	6	0	0	246
Total	7	337	0	0	0	0	0	411	18	8	0	5	786
08:00 AM	2	123	0	0	0	0	0	113	1	1	0	0	240
08:15 AM	2	82	0	0	0	0	0	74	2	2	0	0	162
08:30 AM	4	65	0	0	0	0	0	94	5	2	0	0	170
08:45 AM	1	86	0	0	0	0	0	91	4	2	0	0	184
Total	9	356	0	0	0	0	0	372	12	7	0	0	756
*** BREAK ***													
04:00 PM	0	145	0	0	0	0	0	163	1	3	0	3	315
04:15 PM	2	139	0	0	0	0	0	176	1	2	0	2	322
04:30 PM	0	187	0	0	0	0	0	167	1	3	0	0	358
04:45 PM	0	204	0	0	0	0	0	153	1	4	0	0	362
Total	2	675	0	0	0	0	0	659	4	12	0	5	1357
05:00 PM	0	185	0	0	0	0	0	183	3	2	0	1	374
05:15 PM	0	170	0	0	0	0	0	225	2	2	0	0	399
05:30 PM	0	164	0	0	0	0	0	187	2	1	0	1	355
05:45 PM	0	162	0	0	0	0	0	139	2	0	0	1	304
Total	0	681	0	0	0	0	0	734	9	5	0	3	1432
Grand Total	18	2049	0	0	0	0	0	2176	43	32	0	13	4331
Apprch %	0.9	99.1	0	0	0	0	0	98.1	1.9	71.1	0	28.9	
Total %	0.4	47.3	0	0	0	0	0	50.2	1	0.7	0	0.3	

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOTHARD STREET
E-W Direction: DRIVEWAY 3

File Name : H1311033
Site Code : 00000562
Start Date : 10/30/2013
Page No : 2

	GOTHARD STREET Southbound				DEAD END Westbound				GOTHARD STREET Northbound				DRIVEWAY 3 Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	3	85	0	88	0	0	0	0	0	100	3	103	1	0	2	3	194
07:30 AM	2	91	0	93	0	0	0	0	0	104	3	107	1	0	3	4	204
07:45 AM	2	108	0	110	0	0	0	0	0	**118**	**12**	**130**	6	0	0	6	**246**
08:00 AM	2	**123**	0	**125**	0	0	0	0	0	113	1	114	1	0	0	1	240
Total Volume	9	407	0	416	0	0	0	0	0	435	19	454	9	0	5	14	884
% App. Total	2.2	97.8	0		0	0	0		0	95.8	4.2		64.3	0	35.7		
PHF	.750	.827	.000	.832	.000	.000	.000	.000	.000	.922	.396	.873	.375	.000	.417	.583	.898

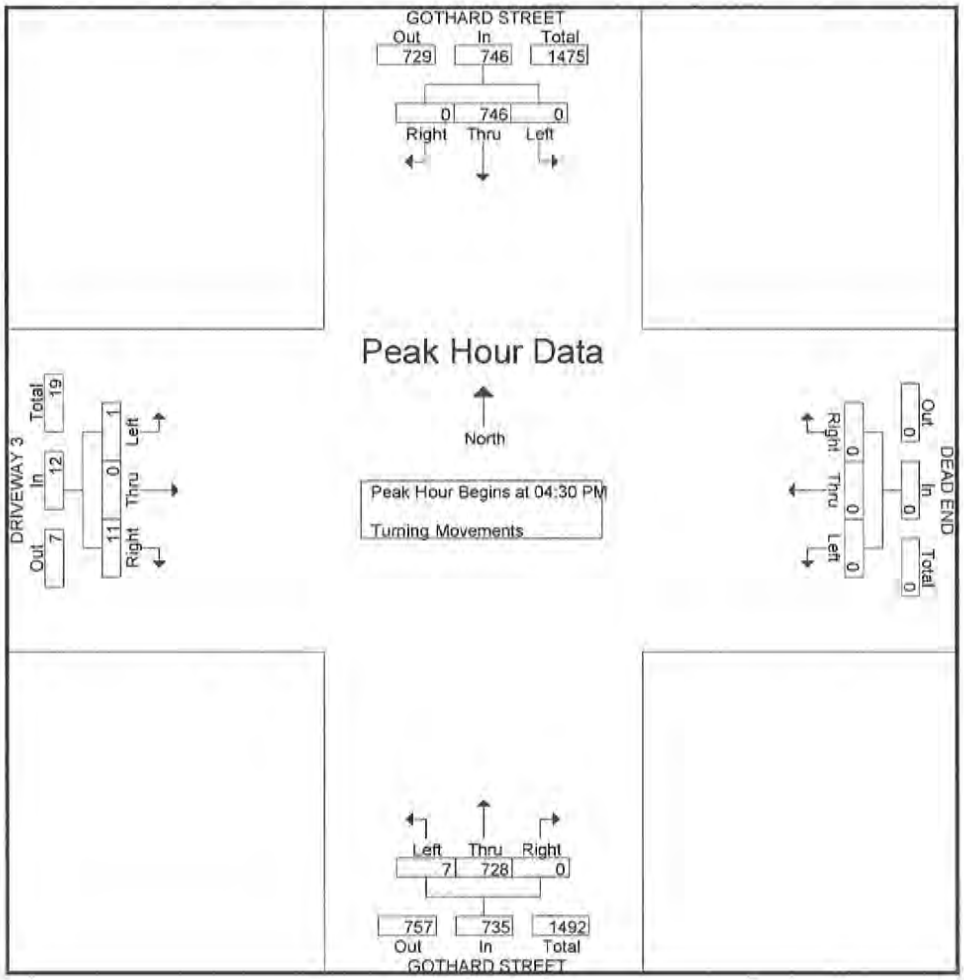


Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOTHARD STREET
E-W Direction: DRIVEWAY 3

File Name : H1311033
Site Code : 00000562
Start Date : 10/30/2013
Page No : 3

	GOTHARD STREET Southbound				DEAD END Westbound				GOTHARD STREET Northbound				DRIVEWAY 3 Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	187	0	187	0	0	0	0	0	167	1	168	3	0	0	3	358
04:45 PM	0	**204**	0	**204**	0	0	0	0	0	153	1	154	4	0	0	4	362
05:00 PM	0	185	0	185	0	0	0	0	0	183	**3**	186	2	0	**1**	3	374
05:15 PM	0	170	0	170	0	0	0	0	0	**225**	2	**227**	2	0	0	2	**399**
Total Volume	0	746	0	746	0	0	0	0	0	728	7	735	11	0	1	12	1493
% App. Total	0	100	0		0	0	0		0	99	1		91.7	0	8.3		
PHF	.000	.914	.000	.914	.000	.000	.000	.000	.000	.809	.583	.809	.688	.000	.250	.750	.935



(21)

Transportation Studies, Inc
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOTHARD STREET
E-W Direction: EDINGER AVENUE

File Name : H1311105
Site Code : 00000000
Start Date : 11/20/2013
Page No : 1

Groups Printed- Turning Movements

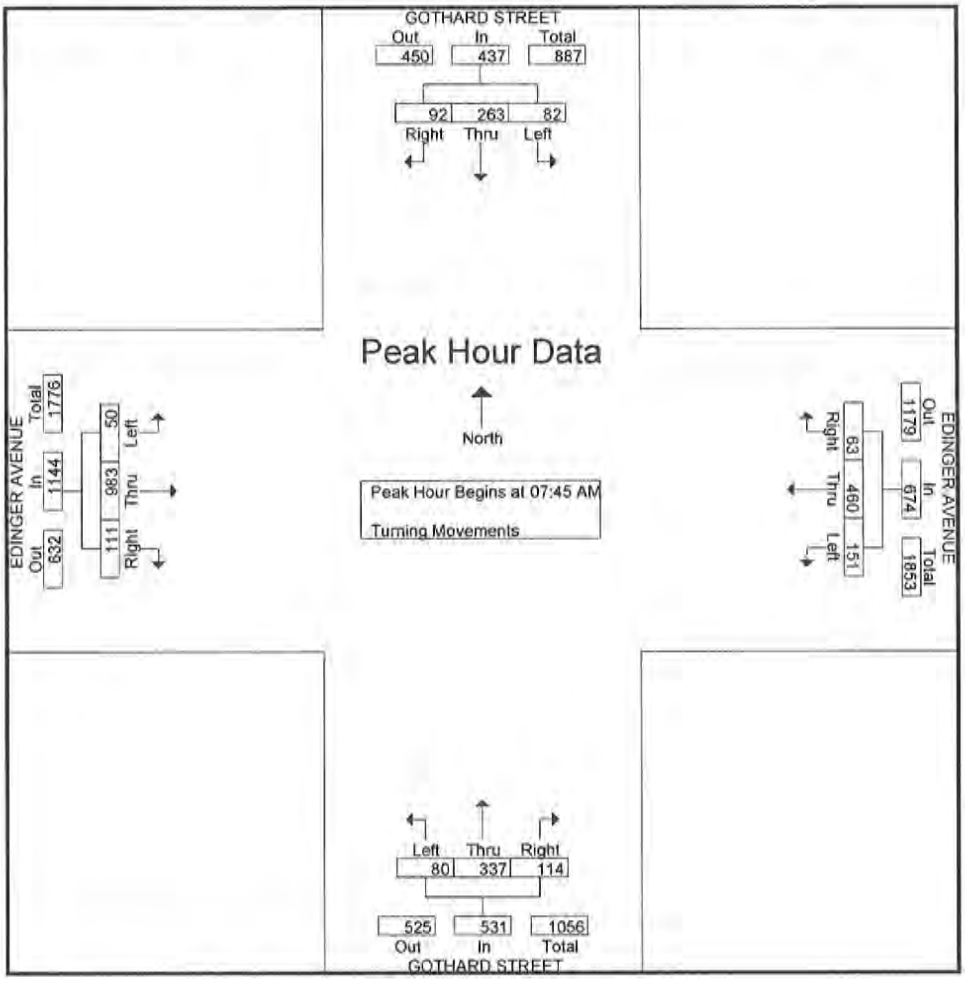
	GOTHARD STREET Southbound			EDINGER AVENUE Westbound			GOTHARD STREET Northbound			EDINGER AVENUE Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
07:00 AM	11	42	6	7	116	16	21	50	12	15	147	6	449
07:15 AM	10	40	11	4	101	16	19	67	19	11	226	11	535
07:30 AM	10	69	16	7	111	21	23	74	16	23	241	7	618
07:45 AM	19	77	19	11	134	33	26	93	18	27	257	10	724
Total	50	228	52	29	462	86	89	284	65	76	871	34	2326
08:00 AM	23	56	15	17	117	38	27	89	21	31	241	13	688
08:15 AM	26	61	22	13	99	37	32	81	18	24	237	12	662
08:30 AM	24	69	26	22	110	43	29	74	23	29	248	15	712
08:45 AM	32	64	21	19	111	41	30	77	17	27	243	11	693
Total	105	250	84	71	437	159	118	321	79	111	969	51	2755
*** BREAK ***													
04:00 PM	19	63	17	19	141	32	32	118	17	27	193	12	690
04:15 PM	24	77	22	25	188	34	27	139	22	26	201	16	801
04:30 PM	27	92	38	30	214	29	36	162	19	23	223	23	916
04:45 PM	22	103	43	33	229	28	40	146	28	21	236	27	956
Total	92	335	120	107	772	123	135	565	86	97	853	78	3363
05:00 PM	28	107	48	29	241	31	42	133	32	24	184	31	930
05:15 PM	32	119	46	36	256	34	47	142	34	26	191	29	992
05:30 PM	32	126	51	31	281	32	44	149	30	22	199	34	1031
05:45 PM	36	129	54	34	257	23	47	154	33	21	185	30	1003
Total	128	481	199	130	1035	120	180	578	129	93	759	124	3956
Grand Total	375	1294	455	337	2706	488	522	1748	359	377	3452	287	12400
Apprch %	17.7	60.9	21.4	9.5	76.6	13.8	19.9	66.5	13.7	9.2	83.9	7	
Total %	3	10.4	3.7	2.7	21.8	3.9	4.2	14.1	2.9	3	27.8	2.3	

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOTHARD STREET
E-W Direction: EDINGER AVENUE

File Name : H1311105
Site Code : 00000000
Start Date : 11/20/2013
Page No : 2

	GOTHARD STREET Southbound				EDINGER AVENUE Westbound				GOTHARD STREET Northbound				EDINGER AVENUE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	19	77	19	115	11	134	33	178	26	93	18	137	27	257	10	294	724
08:00 AM	23	56	15	94	17	117	38	172	27	89	21	137	31	241	13	285	688
08:15 AM	26	61	22	109	13	99	37	149	32	81	18	131	24	237	12	273	662
08:30 AM	24	69	26	119	22	110	43	175	29	74	23	126	29	248	15	292	712
Total Volume	92	263	82	437	63	460	151	674	114	337	80	531	111	983	50	1144	2786
% App. Total	21.1	60.2	18.8		9.3	68.2	22.4		21.5	63.5	15.1		9.7	85.9	4.4		
PHF	.885	.854	.788	.918	.716	.858	.878	.947	.891	.906	.870	.969	.895	.956	.833	.973	.962

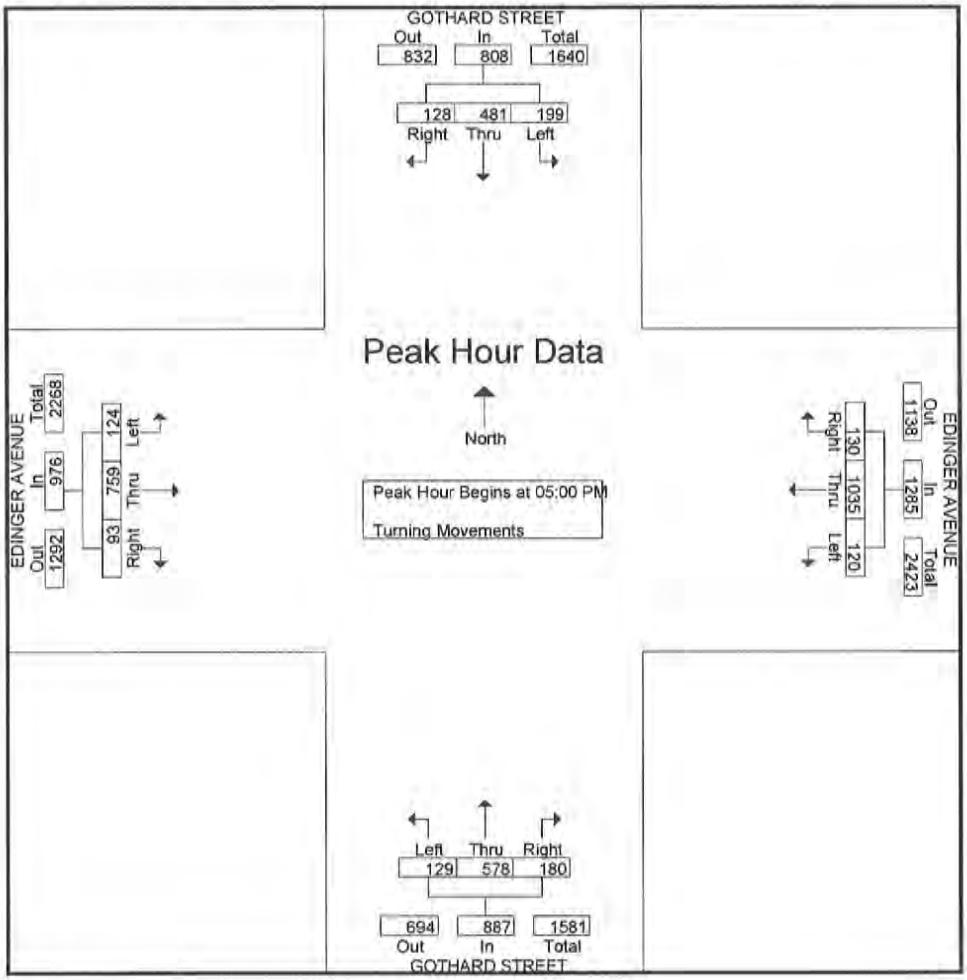


Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOTHARD STREET
E-W Direction: EDINGER AVENUE

File Name : H1311105
Site Code : 00000000
Start Date : 11/20/2013
Page No : 3

	GOTHARD STREET Southbound				EDINGER AVENUE Westbound				GOTHARD STREET Northbound				EDINGER AVENUE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	28	107	48	183	29	241	31	301	42	133	32	207	24	184	31	239	930
05:15 PM	32	119	46	197	36	256	34	326	47	142	34	223	26	191	29	246	992
05:30 PM	32	126	51	209	31	281	32	344	44	149	30	223	22	199	34	255	1031
05:45 PM	36	129	54	219	34	257	23	314	47	154	33	234	21	185	30	236	1003
Total Volume	128	481	199	808	130	1035	120	1285	180	578	129	887	93	759	124	976	3956
% App. Total	15.8	59.5	24.6		10.1	80.5	9.3		20.3	65.2	14.5		9.5	77.8	12.7		
PHF	.889	.932	.921	.922	.903	.921	.882	.934	.957	.938	.949	.948	.894	.954	.912	.957	.959



22

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOTHARD STREET
E-W Direction: HEIL AVENUE

File Name : H1311106
Site Code : 00003873
Start Date : 11/20/2013
Page No : 1

Groups Printed- Turning Movements

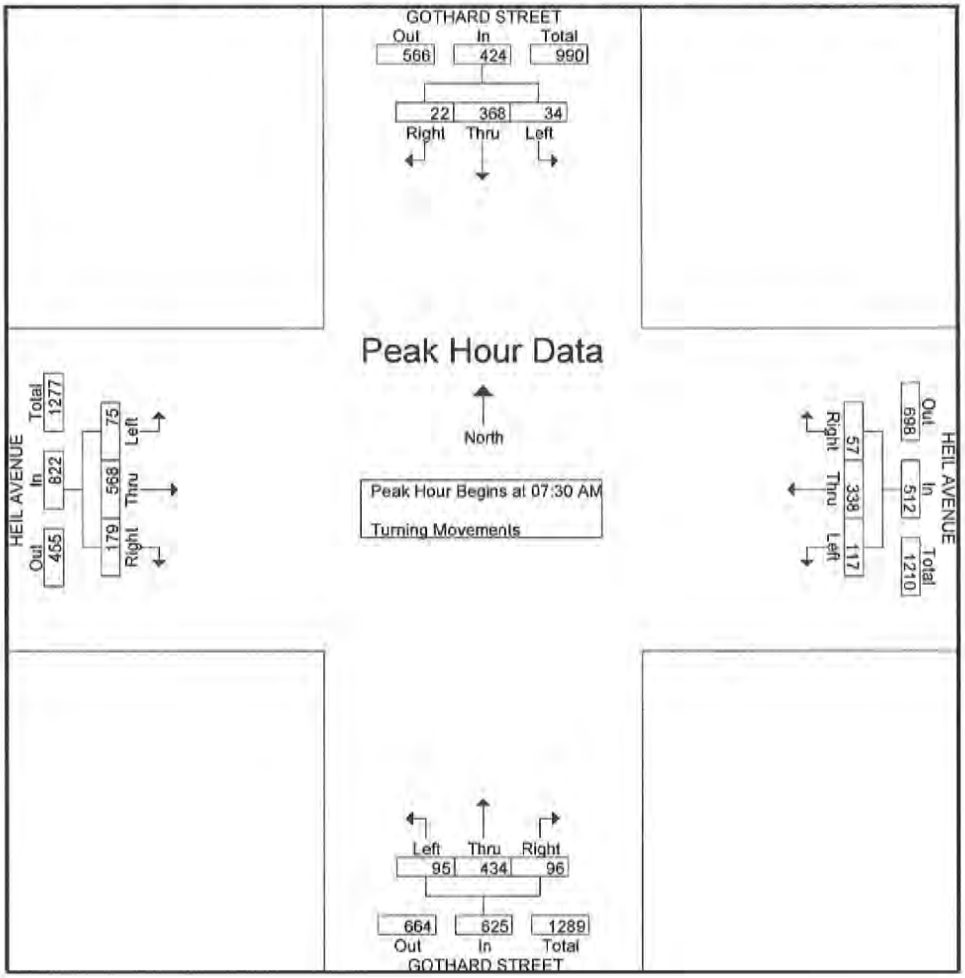
	GOTHARD STREET Southbound			HEIL AVENUE Westbound			GOTHARD STREET Northbound			HEIL AVENUE Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
07:00 AM	7	64	4	4	25	25	27	81	16	16	60	20	349
07:15 AM	7	57	5	6	42	18	13	78	14	30	135	15	420
07:30 AM	7	88	5	11	76	23	20	99	22	29	125	18	523
07:45 AM	5	103	11	20	112	41	33	124	32	54	121	14	670
Total	26	312	25	41	255	107	93	382	84	129	441	67	1962
08:00 AM	4	117	9	16	95	38	27	123	28	52	166	24	699
08:15 AM	6	60	9	10	55	15	16	88	13	44	156	19	491
08:30 AM	3	74	8	22	55	28	26	104	13	27	116	14	490
08:45 AM	5	72	11	13	69	21	15	99	17	26	112	17	477
Total	18	323	37	61	274	102	84	414	71	149	550	74	2157
*** BREAK ***													
04:00 PM	25	152	29	13	107	28	37	146	34	22	104	19	716
04:15 PM	32	149	14	15	121	31	38	179	40	24	94	27	764
04:30 PM	19	144	8	8	129	33	40	176	34	29	122	26	768
04:45 PM	31	159	20	22	96	37	42	173	30	23	107	25	765
Total	107	604	71	58	453	129	157	674	138	98	427	97	3013
05:00 PM	36	131	17	15	125	25	43	191	39	24	123	32	801
05:15 PM	26	149	23	23	149	24	50	218	47	23	104	19	855
05:30 PM	18	128	8	17	131	32	29	198	37	30	111	19	758
05:45 PM	29	155	12	17	132	30	40	174	30	33	136	23	811
Total	109	563	60	72	537	111	162	781	153	110	474	93	3225
Grand Total	260	1802	193	232	1519	449	496	2251	446	486	1892	331	10357
Apprch %	11.5	79.9	8.6	10.5	69	20.4	15.5	70.5	14	17.9	69.8	12.2	
Total %	2.5	17.4	1.9	2.2	14.7	4.3	4.8	21.7	4.3	4.7	18.3	3.2	

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOTHARD STREET
E-W Direction: HEIL AVENUE

File Name : H1311106
Site Code : 00003873
Start Date : 11/20/2013
Page No : 2

	GOTHARD STREET Southbound				HEIL AVENUE Westbound				GOTHARD STREET Northbound				HEIL AVENUE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	7	88	5	100	11	76	23	110	20	99	22	141	29	125	18	172	523
07:45 AM	5	103	11	119	20	112	41	173	33	124	32	189	54	121	14	189	670
08:00 AM	4	117	9	130	16	95	38	149	27	123	28	178	52	166	24	242	699
08:15 AM	6	60	9	75	10	55	15	80	16	88	13	117	44	156	19	219	491
Total Volume	22	368	34	424	57	338	117	512	96	434	95	625	179	568	75	822	2383
% App. Total	5.2	86.8	8		11.1	66	22.9		15.4	69.4	15.2		21.8	69.1	9.1		
PHF	.786	.786	.773	.815	.713	.754	.713	.740	.727	.875	.742	.827	.829	.855	.781	.849	.852

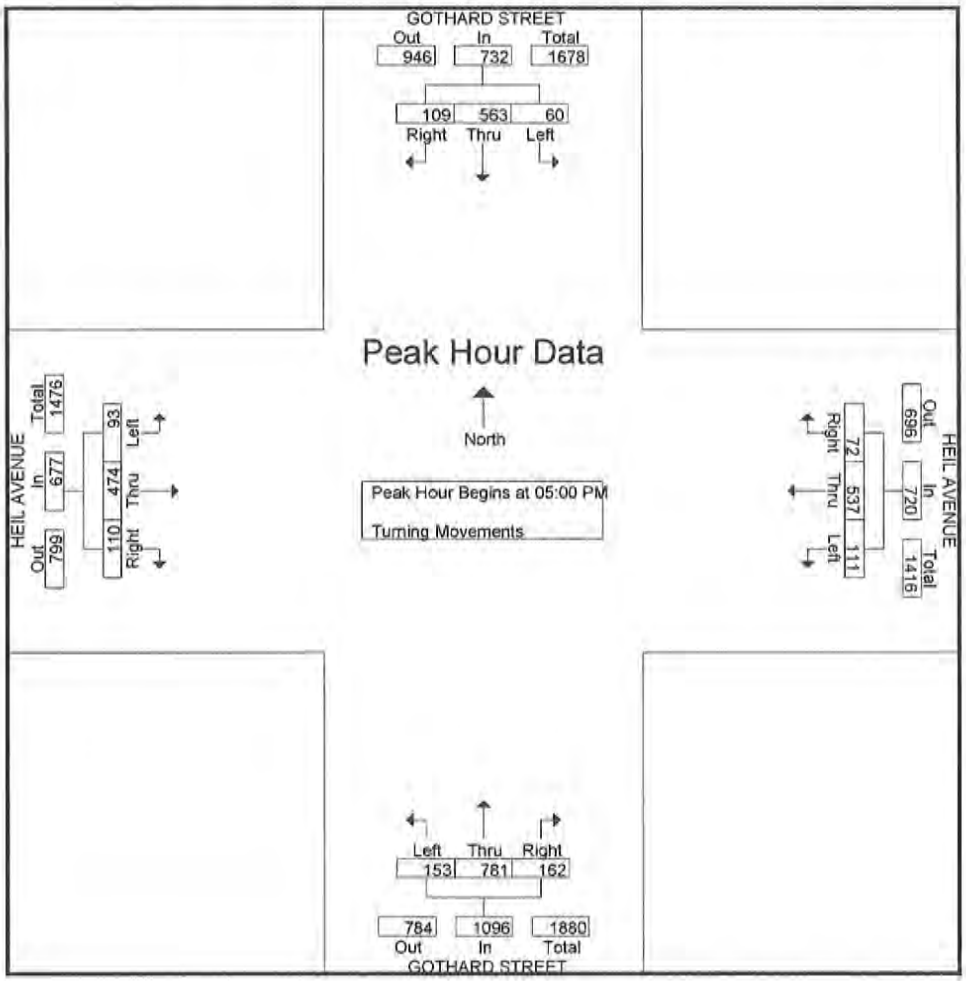


Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: GOTHARD STREET
E-W Direction: HEIL AVENUE

File Name : H1311106
Site Code : 00003873
Start Date : 11/20/2013
Page No : 3

	GOTHARD STREET Southbound				HEIL AVENUE Westbound				GOTHARD STREET Northbound				HEIL AVENUE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**36**	131	17	184	15	125	25	165	43	191	39	273	24	123	**32**	179	801
05:15 PM	26	149	**23**	**198**	**23**	**149**	24	**196**	**50**	**218**	**47**	**315**	23	104	19	146	**855**
05:30 PM	18	128	8	154	17	131	**32**	180	29	198	37	264	30	111	19	160	758
05:45 PM	29	**155**	12	196	17	132	30	179	40	174	30	244	**33**	**136**	23	**192**	811
Total Volume	109	563	60	732	72	537	111	720	162	781	153	1096	110	474	93	677	3225
% App. Total	14.9	76.9	8.2		10	74.6	15.4		14.8	71.3	14		16.2	70	13.7		
PHF	.757	.908	.652	.924	.783	.901	.867	.918	.810	.896	.814	.870	.833	.871	.727	.882	.943



(23)

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: I-405 SB RAMPS
E-W Direction: CENTER AVENUE

File Name : H1311107
Site Code : 00005060
Start Date : 11/20/2013
Page No : 1

Groups Printed- Turning Movements

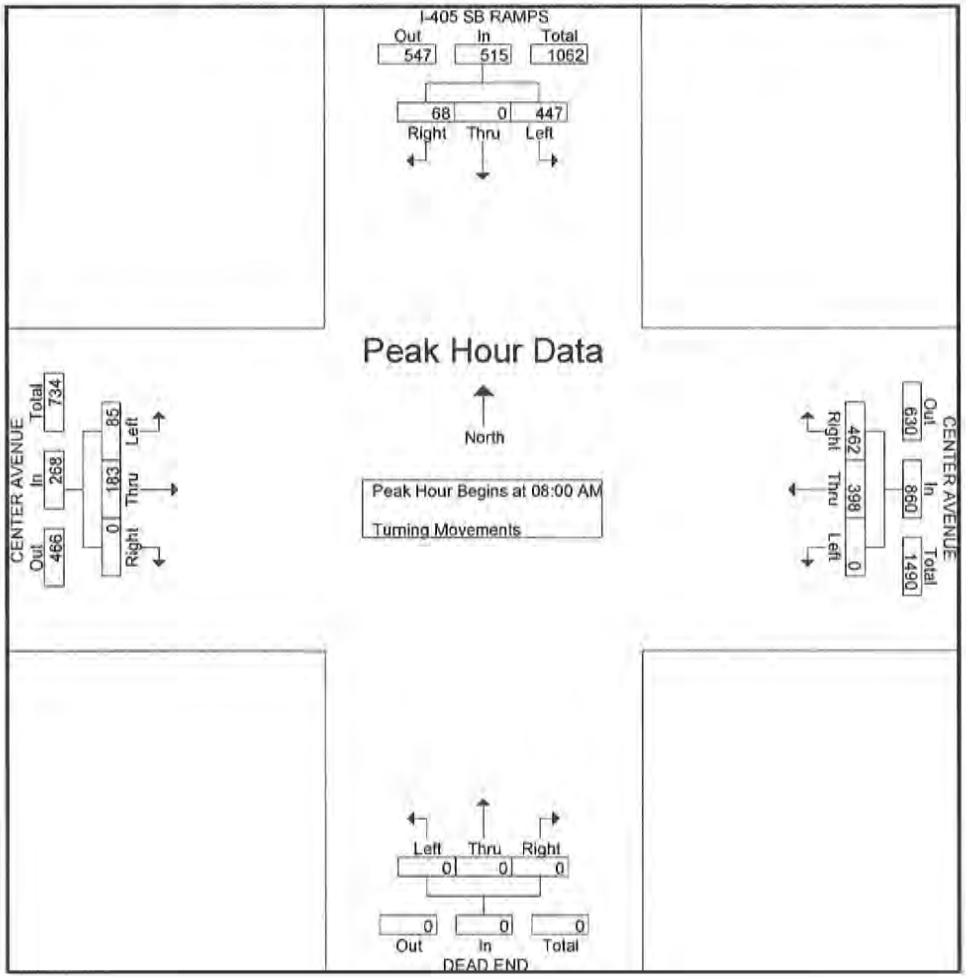
	I-405 SB RAMPS Southbound			CENTER AVENUE Westbound			DEAD END Northbound			CENTER AVENUE Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
07:00 AM	13	0	72	152	45	0	0	0	0	0	33	25	340
07:15 AM	7	0	80	155	55	0	0	0	0	0	21	36	354
07:30 AM	7	0	72	142	59	0	0	0	0	0	37	32	349
07:45 AM	10	0	83	104	83	0	0	0	0	0	43	27	350
Total	37	0	307	553	242	0	0	0	0	0	134	120	1393
08:00 AM	14	0	99	119	104	0	0	0	0	0	34	27	397
08:15 AM	9	0	104	118	103	0	0	0	0	0	57	20	411
08:30 AM	16	0	115	124	97	0	0	0	0	0	41	18	411
08:45 AM	29	0	129	101	94	0	0	0	0	0	51	20	424
Total	68	0	447	462	398	0	0	0	0	0	183	85	1643
*** BREAK ***													
04:00 PM	62	0	203	110	103	0	0	0	0	0	95	81	654
04:15 PM	55	0	165	127	98	0	0	0	0	0	96	77	618
04:30 PM	75	0	207	121	80	0	0	0	0	0	102	72	657
04:45 PM	78	0	172	139	102	0	0	0	0	0	135	112	738
Total	270	0	747	497	383	0	0	0	0	0	428	342	2667
05:00 PM	70	0	200	135	91	0	0	0	0	0	149	91	736
05:15 PM	77	0	174	139	116	0	0	0	0	0	122	107	735
05:30 PM	61	0	164	132	105	0	0	0	0	0	146	105	713
05:45 PM	77	0	182	127	114	0	0	0	0	0	88	88	676
Total	285	0	720	533	426	0	0	0	0	0	505	391	2860
Grand Total	660	0	2221	2045	1449	0	0	0	0	0	1250	938	8563
Apprch %	22.9	0	77.1	58.5	41.5	0	0	0	0	0	57.1	42.9	
Total %	7.7	0	25.9	23.9	16.9	0	0	0	0	0	14.6	11	

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: I-405 SB RAMPS
E-W Direction: CENTER AVENUE

File Name : H1311107
Site Code : 00005060
Start Date : 11/20/2013
Page No : 2

	I-405 SB RAMPS Southbound				CENTER AVENUE Westbound				DEAD END Northbound				CENTER AVENUE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	14	0	99	113	119	**104**	0	**223**	0	0	0	0	0	34	**27**	61	397
08:15 AM	9	0	104	113	118	103	0	221	0	0	0	0	0	**57**	20	**77**	411
08:30 AM	16	0	115	131	**124**	97	0	221	0	0	0	0	0	41	18	59	411
08:45 AM	**29**	0	**129**	**158**	101	94	0	195	0	0	0	0	0	51	20	71	**424**
Total Volume	68	0	447	515	462	398	0	860	0	0	0	0	0	183	85	268	1643
% App. Total	13.2	0	86.8		53.7	46.3	0		0	0	0		0	68.3	31.7		
PHF	.586	.000	.866	.815	.931	.957	.000	.964	.000	.000	.000	.000	.000	.803	.787	.870	.969

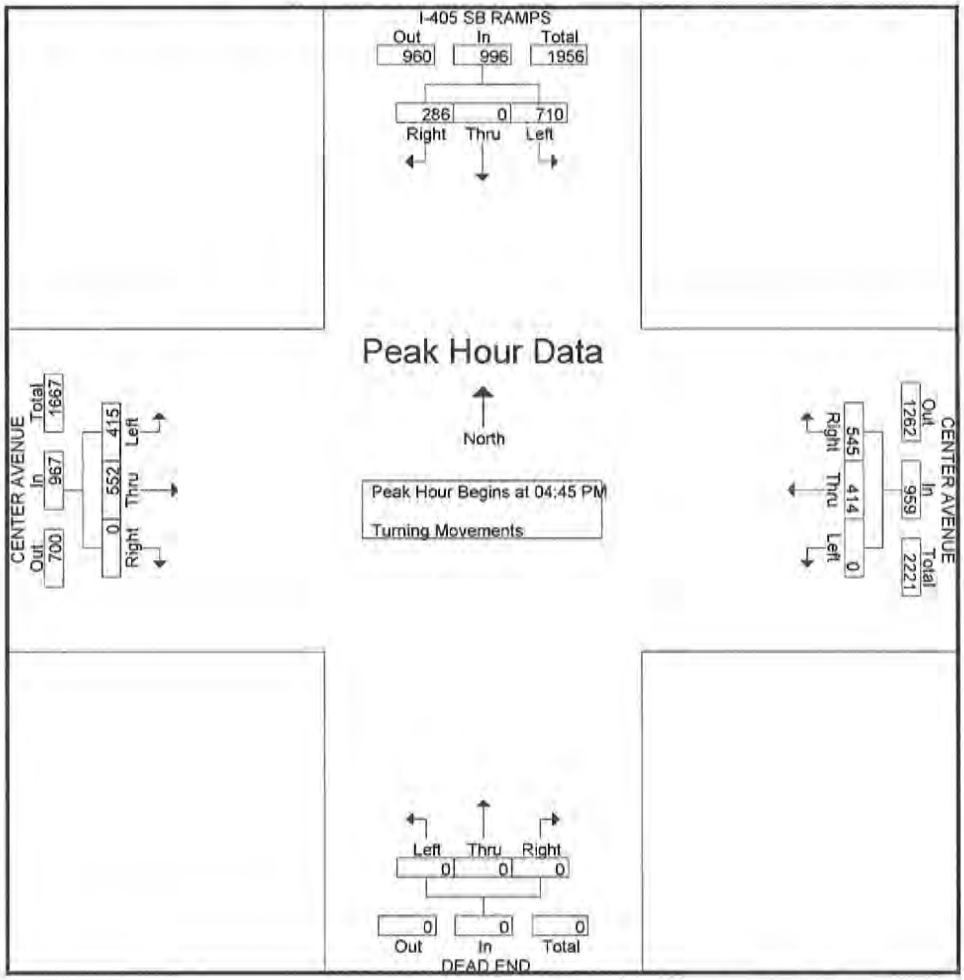


Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: I-405 SB RAMPS
E-W Direction: CENTER AVENUE

File Name : H1311107
Site Code : 00005060
Start Date : 11/20/2013
Page No : 3

	I-405 SB RAMPS Southbound				CENTER AVENUE Westbound				DEAD END Northbound				CENTER AVENUE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**78**	0	172	250	**139**	102	0	241	0	0	0	0	0	135	**112**	247	**738**
05:00 PM	70	0	**200**	**270**	135	91	0	226	0	0	0	0	0	**149**	91	240	736
05:15 PM	77	0	174	251	139	**116**	0	**255**	0	0	0	0	0	122	107	229	735
05:30 PM	61	0	164	225	132	105	0	237	0	0	0	0	0	146	105	**251**	713
Total Volume	286	0	710	996	545	414	0	959	0	0	0	0	0	552	415	967	2922
% App. Total	28.7	0	71.3		56.8	43.2	0		0	0	0		0	57.1	42.9		
PHF	.917	.000	.888	.922	.980	.892	.000	.940	.000	.000	.000	.000	.000	.926	.926	.963	.990



(24)

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA 92780

City: HUNTINGTON BEACH
N-S Direction: BEACH BOULEVARD
E-W Direction: MCFADDEN AVENUE

File Name : H1311108-1
Site Code : 00000553
Start Date : 11/20/2013
Page No : 1

Groups Printed- Turning Movements

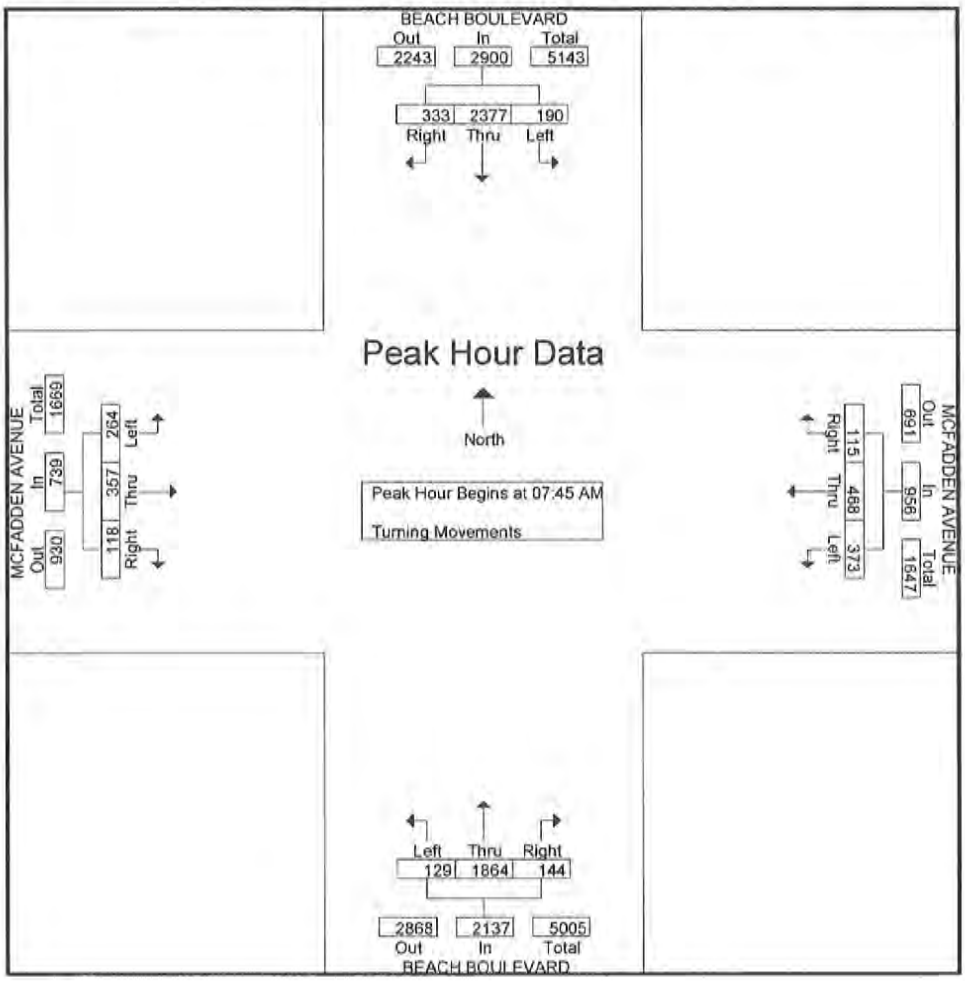
	BEACH BOULEVARD Southbound			MCFADDEN AVENUE Westbound			BEACH BOULEVARD Northbound			MCFADDEN AVENUE Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
07:00 AM	44	481	18	17	66	55	19	330	12	15	40	41	1138
07:15 AM	40	507	25	26	50	73	23	449	31	34	55	47	1360
07:30 AM	77	688	24	18	103	74	26	456	32	23	65	71	1657
07:45 AM	97	616	54	36	129	92	22	557	28	30	75	57	1793
Total	258	2292	121	97	348	294	90	1792	103	102	235	216	5948
08:00 AM	90	501	41	33	138	83	28	422	37	29	102	69	1573
08:15 AM	72	638	43	17	91	90	48	404	25	28	97	94	1647
08:30 AM	74	622	52	29	110	108	46	481	39	31	83	44	1719
08:45 AM	85	676	52	38	97	120	43	344	26	23	70	57	1631
Total	321	2437	188	117	436	401	165	1651	127	111	352	264	6570
*** BREAK ***													
04:00 PM	48	381	41	32	86	71	82	681	45	35	85	74	1661
04:15 PM	49	442	50	34	59	91	71	576	30	36	92	76	1606
04:30 PM	41	400	46	29	95	73	64	528	40	26	108	88	1538
04:45 PM	49	377	42	23	67	89	69	641	37	36	107	80	1617
Total	187	1600	179	118	307	324	286	2426	152	133	392	318	6422
05:00 PM	71	368	30	46	88	101	56	545	40	18	76	76	1515
05:15 PM	71	381	37	34	81	83	72	621	49	46	109	116	1700
05:30 PM	46	407	47	28	81	88	63	519	37	33	86	79	1514
05:45 PM	78	386	34	21	76	76	76	580	46	34	106	86	1599
Total	266	1542	148	129	326	348	267	2265	172	131	377	357	6328
Grand Total	1032	7871	636	461	1417	1367	808	8134	554	477	1356	1155	25268
Apprch %	10.8	82.5	6.7	14.2	43.7	42.1	8.5	85.7	5.8	16	45.4	38.7	
Total %	4.1	31.2	2.5	1.8	5.6	5.4	3.2	32.2	2.2	1.9	5.4	4.6	

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: BEACH BOULEVARD
E-W Direction: MCFADDEN AVENUE

File Name : H1311108-1
Site Code : 00000553
Start Date : 11/20/2013
Page No : 2

	BEACH BOULEVARD Southbound				MCFADDEN AVENUE Westbound				BEACH BOULEVARD Northbound				MCFADDEN AVENUE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	**97**	616	**54**	**767**	**36**	129	92	**257**	22	**557**	28	**607**	30	75	57	162	**1793**
08:00 AM	90	501	41	632	33	**138**	83	254	28	422	37	487	29	**102**	69	200	1573
08:15 AM	72	**638**	43	753	17	91	90	198	**48**	404	25	477	28	97	**94**	**219**	1647
08:30 AM	74	622	52	748	29	110	**108**	247	46	481	**39**	566	**31**	83	44	158	1719
Total Volume	333	2377	190	2900	115	468	373	956	144	1864	129	2137	118	357	264	739	6732
% App. Total	11.5	82	6.6		12	49	39		6.7	87.2	6		16	48.3	35.7		
PHF	.858	.931	.880	.945	.799	.848	.863	.930	.750	.837	.827	.880	.952	.875	.702	.844	.939

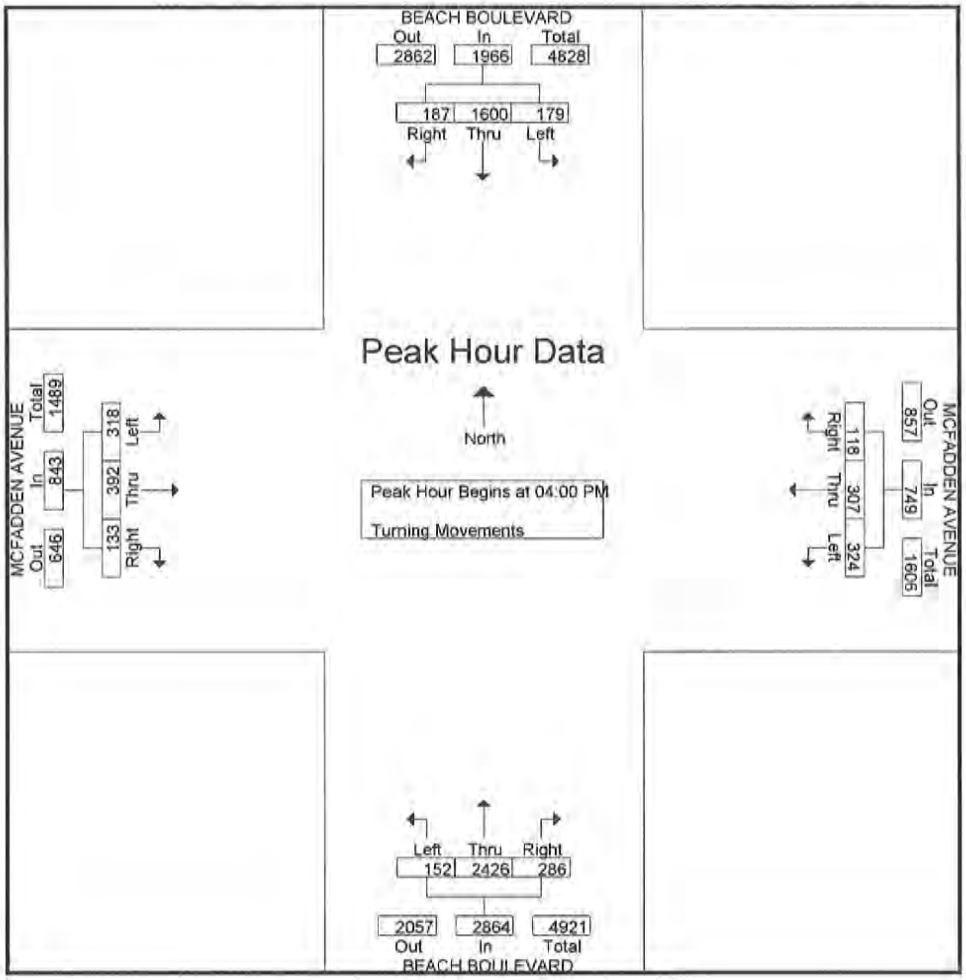


Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: BEACH BOULEVARD
E-W Direction: MCFADDEN AVENUE

File Name : H1311108-1
Site Code : 00000553
Start Date : 11/20/2013

	BEACH BOULEVARD Southbound				MCFADDEN AVENUE Westbound				BEACH BOULEVARD Northbound				MCFADDEN AVENUE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	48	381	41	470	32	86	71	189	**82**	**681**	**45**	**808**	35	85	74	194	**1661**
04:15 PM	**49**	**442**	**50**	**541**	**34**	59	**91**	184	71	576	30	677	**36**	92	76	204	1606
04:30 PM	41	400	46	487	29	**95**	73	**197**	64	528	40	632	26	**108**	**88**	222	1538
04:45 PM	49	377	42	468	23	67	89	179	69	641	37	747	36	107	80	**223**	1617
Total Volume	187	1600	179	1966	118	307	324	749	286	2426	152	2864	133	392	318	843	6422
% App. Total	9.5	81.4	9.1		15.8	41	43.3		10	84.7	5.3		15.8	46.5	37.7		
PHF	.954	.905	.895	.909	.868	.808	.890	.951	.872	.891	.844	.886	.924	.907	.903	.945	.967



(15)

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: BEACH BOULEVARD
E-W Direction: CENTER AVENUE

File Name : H1311109-1
Site Code : 00000000
Start Date : 11/20/2013
Page No : 1

Groups Printed- Turning Movements

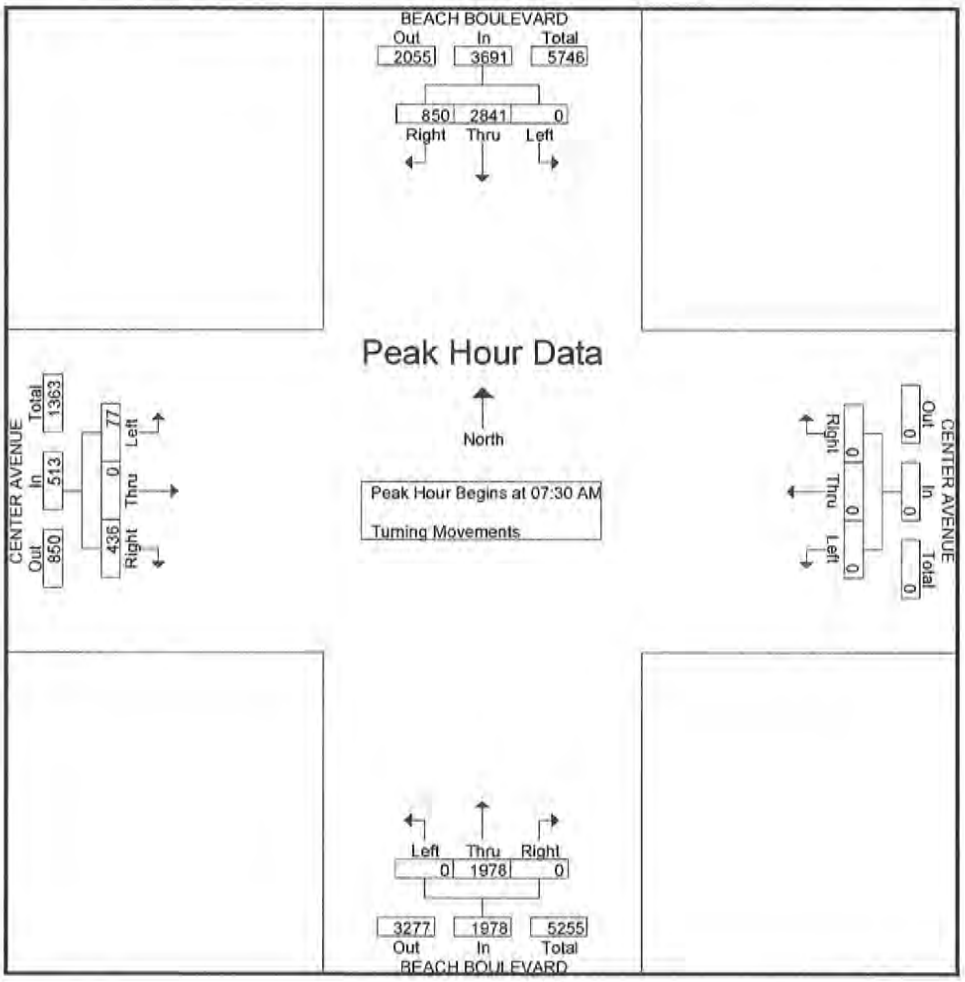
	BEACH BOULEVARD Southbound			CENTER AVENUE Westbound			BEACH BOULEVARD Northbound			CENTER AVENUE Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
07:00 AM	206	448	0	0	0	0	0	449	0	77	0	13	1193
07:15 AM	183	494	0	0	0	0	0	476	0	96	0	22	1271
07:30 AM	226	750	0	0	0	0	0	558	0	107	0	13	1654
07:45 AM	190	747	0	0	0	0	0	507	0	105	0	13	1562
Total	805	2439	0	0	0	0	0	1990	0	385	0	61	5680
08:00 AM	217	701	0	0	0	0	0	488	0	97	0	27	1530
08:15 AM	217	643	0	0	0	0	0	425	0	127	0	24	1436
08:30 AM	219	594	0	0	0	0	0	371	0	160	0	38	1382
08:45 AM	209	611	0	0	0	0	0	357	0	137	0	25	1339
Total	862	2549	0	0	0	0	0	1641	0	521	0	114	5687
*** BREAK ***													
04:00 PM	202	567	0	0	0	0	0	562	0	206	0	80	1617
04:15 PM	222	541	0	0	0	0	0	540	0	227	0	65	1595
04:30 PM	222	587	0	0	0	0	0	571	0	227	0	75	1682
04:45 PM	229	524	0	0	0	0	0	606	0	232	0	68	1659
Total	875	2219	0	0	0	0	0	2279	0	892	0	288	6553
05:00 PM	215	572	0	0	0	0	0	615	0	264	0	75	1741
05:15 PM	269	564	0	0	0	0	0	623	0	254	0	70	1780
05:30 PM	235	558	0	0	0	0	0	616	0	233	0	71	1713
05:45 PM	221	514	0	0	0	0	0	608	0	204	0	54	1601
Total	940	2208	0	0	0	0	0	2462	0	955	0	270	6835
Grand Total	3482	9415	0	0	0	0	0	8372	0	2753	0	733	24755
Apprch %	27	73	0	0	0	0	0	100	0	79	0	21	
Total %	14.1	38	0	0	0	0	0	33.8	0	11.1	0	3	

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: BEACH BOULEVARD
E-W Direction: CENTER AVENUE

File Name : H1311109-1
Site Code : 00000000
Start Date : 11/20/2013
Page No : 2

	BEACH BOULEVARD Southbound				CENTER AVENUE Westbound				BEACH BOULEVARD Northbound				CENTER AVENUE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	**226**	**750**	0	**976**	0	0	0	0	0	**558**	0	**558**	107	0	13	120	**1654**
07:45 AM	190	747	0	937	0	0	0	0	0	507	0	507	105	0	13	118	1562
08:00 AM	217	701	0	918	0	0	0	0	0	488	0	488	97	0	**27**	124	1530
08:15 AM	217	643	0	860	0	0	0	0	0	425	0	425	**127**	0	24	**151**	1436
Total Volume	850	2841	0	3691	0	0	0	0	0	1978	0	1978	436	0	77	513	6182
% App. Total	23	77	0		0	0	0		0	100	0		85	0	15		
PHF	.940	.947	.000	.945	.000	.000	.000	.000	.000	.886	.000	.886	.858	.000	.713	.849	.934

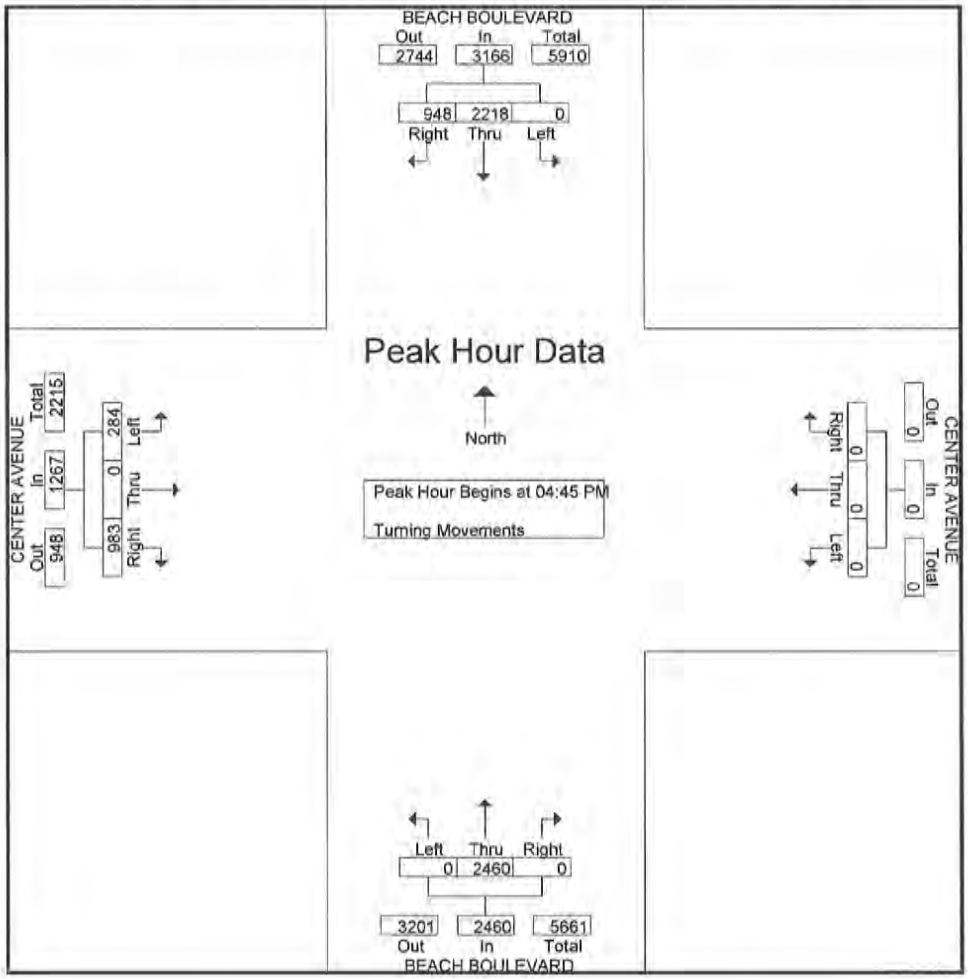


Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: BEACH BOULEVARD
E-W Direction: CENTER AVENUE

File Name : H1311109-1
Site Code : 00000000
Start Date : 11/20/2013
Page No : 3

	BEACH BOULEVARD Southbound				CENTER AVENUE Westbound				BEACH BOULEVARD Northbound				CENTER AVENUE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	229	524	0	753	0	0	0	0	0	606	0	606	232	0	68	300	1659
05:00 PM	215	**572**	0	787	0	0	0	0	0	615	0	615	**264**	0	**75**	**339**	1741
05:15 PM	**269**	564	0	**833**	0	0	0	0	0	**623**	0	**623**	254	0	70	324	**1780**
05:30 PM	235	558	0	793	0	0	0	0	0	616	0	616	233	0	71	304	1713
Total Volume	948	2218	0	3166	0	0	0	0	0	2460	0	2460	983	0	284	1267	6893
% App. Total	29.9	70.1	0		0	0	0		0	100	0		77.6	0	22.4		
PHF	.881	.969	.000	.950	.000	.000	.000	.000	.000	.987	.000	.987	.931	.000	.947	.934	.968



(26)

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: BEACH BOULEVARD
E-W Direction: EDINGER AVENUE

File Name : H1311110-1
Site Code : 00000000
Start Date : 11/20/2013
Page No : 1

Groups Printed- Turning Movements

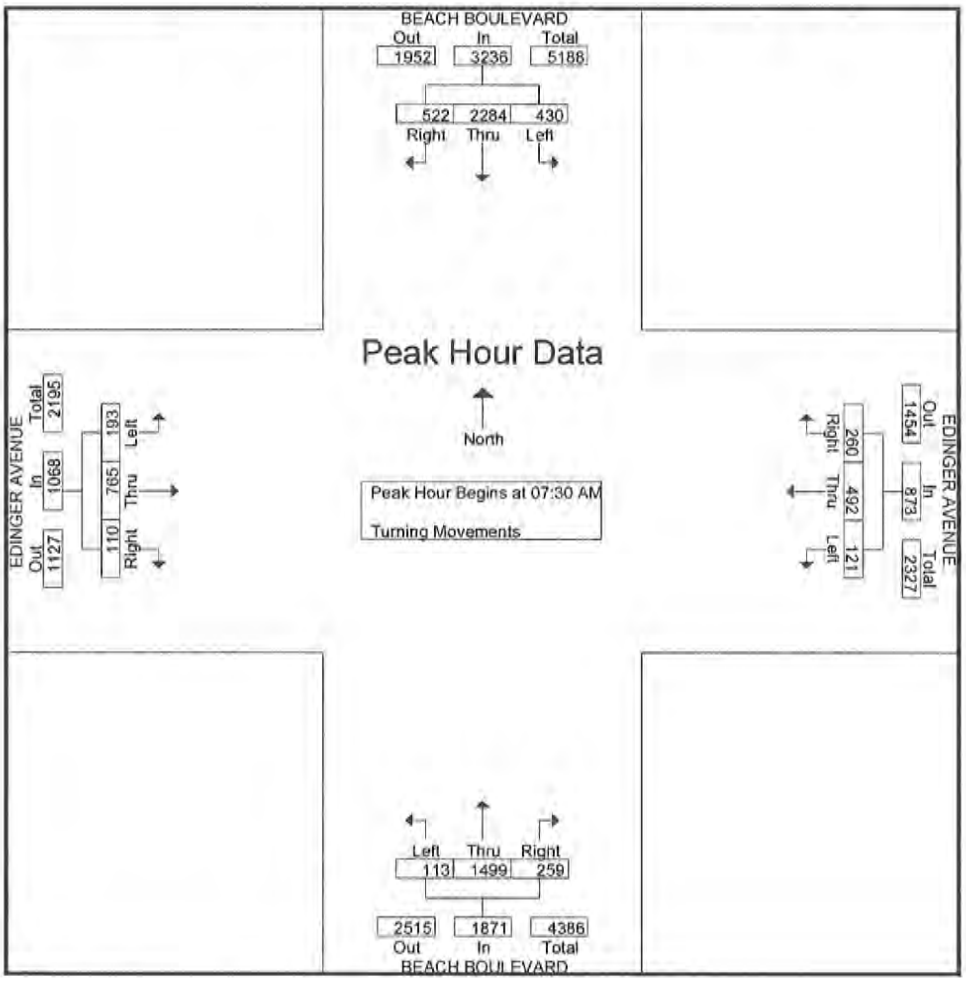
	BEACH BOULEVARD Southbound			EDINGER AVENUE Westbound			BEACH BOULEVARD Northbound			EDINGER AVENUE Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
07:00 AM	79	383	68	53	55	15	53	339	16	20	151	42	1274
07:15 AM	91	450	81	64	72	13	71	367	27	18	223	65	1542
07:30 AM	136	579	136	83	126	23	86	404	28	18	206	43	1868
07:45 AM	155	569	105	58	172	43	55	399	27	29	209	53	1874
Total	461	1981	390	258	425	94	265	1509	98	85	789	203	6558
08:00 AM	129	574	105	59	96	24	63	371	32	30	199	54	1736
08:15 AM	102	562	84	60	98	31	55	325	26	33	151	43	1570
08:30 AM	119	561	93	53	92	24	49	269	49	28	161	31	1529
08:45 AM	120	577	69	34	91	35	37	282	37	38	137	47	1504
Total	470	2274	351	206	377	114	204	1247	144	129	648	175	6339
*** BREAK ***													
04:00 PM	129	546	93	25	109	38	57	403	79	52	197	87	1815
04:15 PM	148	531	87	29	102	34	54	416	84	51	189	81	1806
04:30 PM	151	560	99	27	112	41	58	411	85	56	218	96	1914
04:45 PM	135	564	62	31	116	36	51	436	99	68	199	84	1881
Total	563	2201	341	112	439	149	220	1666	347	227	803	348	7416
05:00 PM	159	607	90	36	91	39	101	459	93	73	231	90	2069
05:15 PM	159	537	80	35	139	42	83	475	99	71	185	80	1985
05:30 PM	114	568	96	70	215	102	138	468	71	32	166	61	2101
05:45 PM	117	554	80	72	186	78	172	452	58	49	136	60	2014
Total	549	2266	346	213	631	261	494	1854	321	225	718	291	8169
Grand Total	2043	8722	1428	789	1872	618	1183	6276	910	666	2958	1017	28482
Apprch %	16.8	71.5	11.7	24.1	57.1	18.8	14.1	75	10.9	14.4	63.7	21.9	
Total %	7.2	30.6	5	2.8	6.6	2.2	4.2	22	3.2	2.3	10.4	3.6	

Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: BEACH BOULEVARD
E-W Direction: EDINGER AVENUE

File Name : H1311110-1
Site Code : 00000000
Start Date : 11/20/2013
Page No : 2

	BEACH BOULEVARD Southbound				EDINGER AVENUE Westbound				BEACH BOULEVARD Northbound				EDINGER AVENUE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	136	**579**	**136**	**851**	**83**	126	23	232	**86**	**404**	28	**518**	18	206	43	267	1868
07:45 AM	**155**	569	105	829	58	**172**	**43**	**273**	55	399	27	481	29	**209**	53	**291**	**1874**
08:00 AM	129	574	105	808	59	96	24	179	63	371	**32**	466	30	199	**54**	283	1736
08:15 AM	102	562	84	748	60	98	31	189	55	325	26	406	**33**	151	43	227	1570
Total Volume	522	2284	430	3236	260	492	121	873	259	1499	113	1871	110	765	193	1068	7048
% App. Total	16.1	70.6	13.3		29.8	56.4	13.9		13.8	80.1	6		10.3	71.6	18.1		
PHF	.842	.986	.790	.951	.783	.715	.703	.799	.753	.928	.883	.903	.833	.915	.894	.918	.940

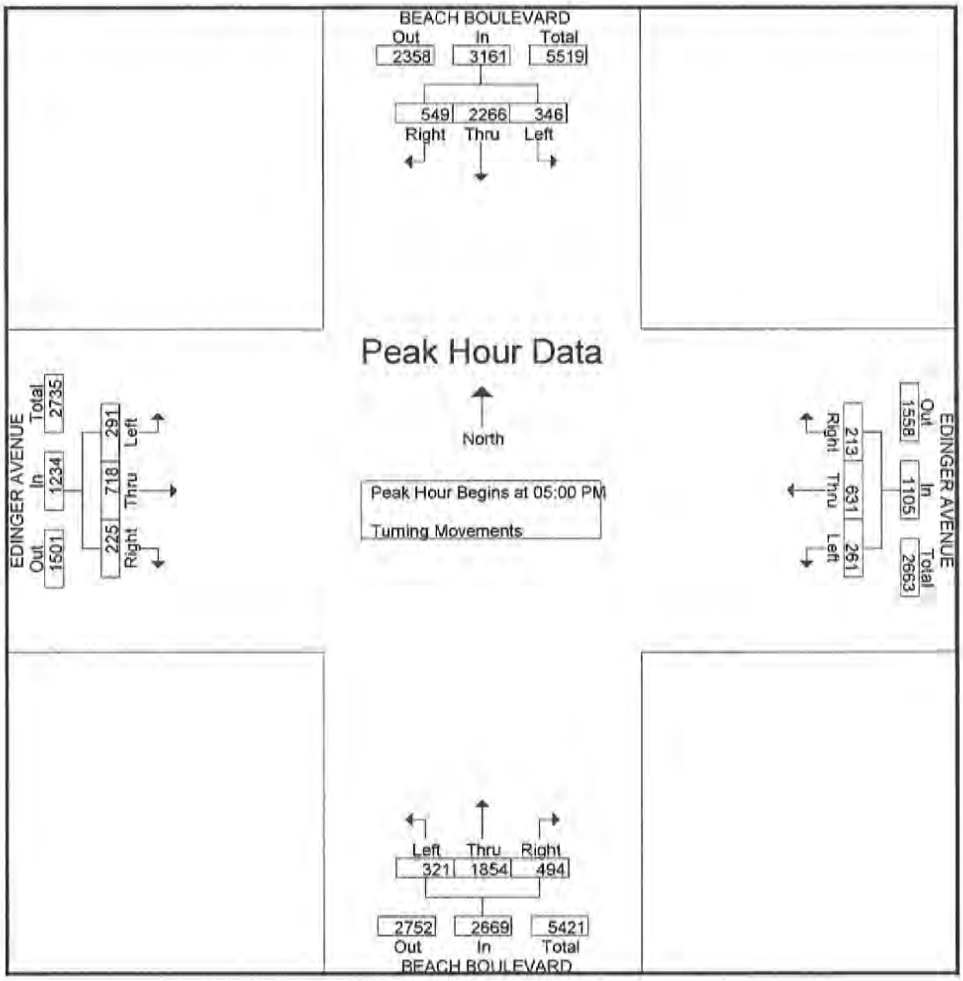


Transportation Studies, Inc.
2640 Walnut Avenue, Suite H
Tustin, CA. 92780

City: HUNTINGTON BEACH
N-S Direction: BEACH BOULEVARD
E-W Direction: EDINGER AVENUE

File Name : H1311110-1
Site Code : 00000000
Start Date : 11/20/2013
Page No : 3

	BEACH BOULEVARD Southbound				EDINGER AVENUE Westbound				BEACH BOULEVARD Northbound				EDINGER AVENUE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**159**	**607**	90	**856**	36	91	39	166	101	459	93	653	**73**	**231**	**90**	**394**	2069
05:15 PM	159	537	80	776	35	139	42	216	83	**475**	**99**	657	71	185	80	336	1985
05:30 PM	114	568	**96**	778	70	**215**	**102**	**387**	138	468	71	677	32	166	61	259	**2101**
05:45 PM	117	554	80	751	**72**	186	78	336	**172**	452	58	**682**	49	136	60	245	2014
Total Volume	549	2266	346	3161	213	631	261	1105	494	1854	321	2669	225	718	291	1234	8169
% App. Total	17.4	71.7	10.9		19.3	57.1	23.6		18.5	69.5	12		18.2	58.2	23.6		
PHF	.863	.933	.901	.923	.740	.734	.640	.714	.718	.976	.811	.978	.771	.777	.808	.783	.972



APPENDIX A-I

EXISTING GOLDEN WEST COLLEGE TRIP GENERATION SUMMARY

TABLE A
EXISTING TRIP GENERATION SUMMARY
Golden West College, Huntington Beach

Location	Daily	AM Peak Hour			PM Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total
Gothard Street at Driveway No. 1	2160	179	52	231	59	157	216
Gothard Street at Center Avenue	1759	153	35	188	60	114	174
Gothard Street at Driveway No. 3	190	28	14	42	7	12	19
Driveway No. 4 at Edinger Avenue	870	107	7	114	54	33	87
Driveway No. 5 at Edinger Avenue	390	61	4	65	16	23	39
Golden West College at Edinger Avenue	2015	92	23	115	85	41	126
Goldenwest Street at Driveway No. 7	420	43	8	51	16	26	42
Goldenwest Street at Driveway No. 8	450	36	3	39	27	18	45
Goldenwest Street at Golden West College	2337	95	58	153	112	120	232
Goldenwest Street at Driveway No. 10	860	11	3	14	7	79	86
Goldenwest Street at Driveway No. 11	2400	72	4	76	185	55	240
Goldenwest Street at Driveway No. 12	690	11	24	35	12	57	69
Total	**14541**	**888**	**235**	**1123**	**640**	**735**	**1375**
Trip Rate Based On 12,746 Students	1.141	0.070	0.018	0.088	0.050	0.058	0.108
12,746 Students To 15,391 Students (Increase of 2,645 Students)	3,018	185	48	233	132	153	285

APPENDIX B

EXISTING INTERSECTION LEVEL OF SERVICE CALCULATION WORKSHEETS

AM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Edwards Street at McFadden Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.507
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	24	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	2	0 1
Volume Module:												
Base Vol:	126	497	56	186	604	92	83	486	125	58	463	84
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	126	497	56	186	604	92	83	486	125	58	463	84
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	126	497	56	186	604	92	83	486	125	58	463	84
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	126	497	56	186	604	92	83	486	125	58	463	84
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	126	497	56	186	604	92	83	486	125	58	463	84
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	126	497	56	186	604	92	83	486	125	58	463	84
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.80	0.20	1.00	1.74	0.26	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	3056	344	1700	2951	449	1700	3400	1700	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.07	0.16	0.16	0.11	0.20	0.20	0.05	0.14	0.07	0.03	0.14	0.05
Crit Moves:		****		****			****				****	

AM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Edwards Street at Edinger Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.568
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	3 0	1	1 0	3 0	1
Volume Module:												
Base Vol:	161	531	157	166	569	94	67	976	104	63	565	93
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	161	531	157	166	569	94	67	976	104	63	565	93
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	161	531	157	166	569	94	67	976	104	63	565	93
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	161	531	157	166	569	94	67	976	104	63	565	93
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	161	531	157	166	569	94	67	976	104	63	565	93
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	161	531	157	166	569	94	67	976	104	63	565	93
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.72	0.28	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1700	3400	1700	1700	2918	482	1700	5100	1700	1700	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.09	0.16	0.09	0.10	0.19	0.20	0.04	0.19	0.06	0.04	0.11	0.05
Crit Moves:	****					****		****		****		

AM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Goldenwest Street at I-405 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.420
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	21	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3	0 0	0 0	2	0 1	1 0	1!	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	0	1230	0	0	791	295	316	0	341	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1230	0	0	791	295	316	0	341	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1230	0	0	791	295	316	0	341	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1230	0	0	791	0	316	0	341	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1230	0	0	791	0	316	0	341	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1230	0	0	791	0	316	0	341	0	0	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	0.00	0.00	2.00	1.00	1.44	0.00	1.56	0.00	0.00	0.00
Final Sat.:	0	5100	0	0	3400	1700	2453	0	2647	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.24	0.00	0.00	0.23	0.00	0.13	0.00	0.13	0.00	0.00	0.00
Crit Moves:		****		****					****			

AM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Goldenwest Street at Bolsa Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.537
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxx
Optimal Cycle:	25	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2	1 0	1 0	2	1 0	2 0	3	0 1	2 0	3	0 1
Volume Module:												
Base Vol:	50	854	127	157	1003	71	85	314	76	317	902	292
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	854	127	157	1003	71	85	314	76	317	902	292
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	50	854	127	157	1003	71	85	314	76	317	902	292
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	854	127	157	1003	71	85	314	76	317	902	292
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	854	127	157	1003	71	85	314	76	317	902	292
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	854	127	157	1003	71	85	314	76	317	902	292
OvlAdjVol:									51			
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.61	0.39	1.00	2.80	0.20	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	4440	660	1700	4763	337	3400	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.01	0.19	0.19	0.09	0.21	0.21	0.03	0.06	0.04	0.09	0.18	0.17
OvlAdjV/S:									0.03			
Crit Moves:		****			****			****			****	

AM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Goldenwest Street at McFadden Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.585
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	154	799	43	178	1083	84	112	462	103	135	363	115
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	154	799	43	178	1083	84	112	462	103	135	363	115
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	154	799	43	178	1083	84	112	462	103	135	363	115
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	154	799	43	178	1083	84	112	462	103	135	363	115
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	154	799	43	178	1083	84	112	462	103	135	363	115
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	154	799	43	178	1083	84	112	462	103	135	363	115
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.78	0.22	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	5100	1700	1700	4733	367	1700	3400	1700	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.09	0.16	0.03	0.10	0.23	0.23	0.07	0.14	0.06	0.08	0.11	0.07
Crit Moves:	****				****			****			****	

AM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Goldenwest Street at Driveway No. 12

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[10.9]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	2	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	1
Volume Module:																				
Base Vol:	0	1082		11		0	1329		0		0		0		0	0		0		24
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	0	1082		11		0	1329		0		0		0		0	0		0		24
Added Vol:	0	0		0		0	0		0		0		0		0	0		0		0
PasserByVol:	0	0		0		0	0		0		0		0		0	0		0		0
Initial Fut:	0	1082		11		0	1329		0		0		0		0	0		0		24
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Volume:	0	1082		11		0	1329		0		0		0		0	0		0		24
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0		0
FinalVolume:	0	1082		11		0	1329		0		0		0		0	0		0		24
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx			6.9
FollowUpTim:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx			3.3
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx			366
Potent Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx			637
Move Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx			637
Volume/Cap:	xxxx	xxxx		xxxx		xxxx	xxxx		xxxx		xxxx	xxxx		xxxx		xxxx	xxxx			0.04
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx			0.1
Control Del:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx			10.9
LOS by Move:	*	*		*		*	*		*		*	*		*		*	*			B
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx			xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx			xxxxx
Shrd ConDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx			xxxxx
Shared LOS:	*	*		*		*	*		*		*	*		*		*	*			*
ApproachDel:	xxxxxx			xxxxxx					xxxxxx							10.9				
ApproachLOS:	*			*					*							B				

Note: Queue reported is the number of cars per lane.

AM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Goldenwest Street at Driveway No. 11

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: D[25.8]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	1	0	2	1	0	1	0	2	1	0	0	0	1!	0	0	0	0	1!	0	0
Volume Module:																				
Base Vol:	7	1086		4		68	1258		3		4		0		18	1		0		3
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	7	1086		4		68	1258		3		4		0		18	1		0		3
Added Vol:	0	0		0		0	0		0		0		0		0	0		0		0
PasserByVol:	0	0		0		0	0		0		0		0		0	0		0		0
Initial Fut:	7	1086		4		68	1258		3		4		0		18	1		0		3
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Volume:	7	1086		4		68	1258		3		4		0		18	1		0		3
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0		0
FinalVolume:	7	1086		4		68	1258		3		4		0		18	1		0		3
Critical Gap Module:																				
Critical Gp:	4.1	xxxx	xxxxx			4.1	xxxx	xxxxx			7.5		6.5		6.9	7.5		6.5		6.9
FollowUpTim:	2.2	xxxx	xxxxx			2.2	xxxx	xxxxx			3.5		4.0		3.3	3.5		4.0		3.3
Capacity Module:																				
Cnflict Vol:	1261	xxxx	xxxxx			1090	xxxx	xxxxx			1772		2500		421	1657		2499		364
Potent Cap.:	558	xxxx	xxxxx			648	xxxx	xxxxx			54		29		587	66		29		639
Move Cap.:	558	xxxx	xxxxx			648	xxxx	xxxxx			49		26		587	58		26		639
Volume/Cap:	0.01	xxxx	xxxx			0.10	xxxx	xxxx			0.08		0.00		0.03	0.02		0.00		0.00
Level Of Service Module:																				
2Way95thQ:	0.0	xxxx	xxxxx			0.4	xxxx	xxxxx			xxxx		xxxx		xxxxx	xxxx		xxxx		xxxxx
Control Del:	11.5	xxxx	xxxxx			11.2	xxxx	xxxxx			xxxxx		xxxx		xxxxx	xxxxx		xxxx		xxxxx
LOS by Move:	B	*		*		B	*		*		*		*		*	*		*		*
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx		195		xxxxx	xxxx		182		xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		0.4		xxxxx	xxxxx		0.1		xxxxx
Shrd ConDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		25.8		xxxxx	xxxxx		25.2		xxxxx
Shared LOS:	*	*		*		*	*		*		*		D		*	*		D		*
ApproachDel:	xxxxxx					xxxxxx					25.8					25.2				
ApproachLOS:	*					*					D					D				

Note: Queue reported is the number of cars per lane.

AM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Goldenwest Street at Driveway No. 10

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: B[10.7]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	2	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	1
Volume Module:																				
Base Vol:	0	1085		11		0	1251		0		0		0		0	0		0		3
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	0	1085		11		0	1251		0		0		0		0	0		0		3
Added Vol:	0	0		0		0	0		0		0		0		0	0		0		0
PasserByVol:	0	0		0		0	0		0		0		0		0	0		0		0
Initial Fut:	0	1085		11		0	1251		0		0		0		0	0		0		3
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Volume:	0	1085		11		0	1251		0		0		0		0	0		0		3
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0		0
FinalVolume:	0	1085		11		0	1251		0		0		0		0	0		0		3
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx		6.9
FollowUpTim:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx		3.3
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx		367
Potent Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx		636
Move Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx		636
Volume/Cap:	xxxx	xxxx		xxxx		xxxx	xxxx		xxxx		xxxx		xxxx		xxxx	xxxx		xxxx		0.00
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx		0.0
Control Del:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx		10.7
LOS by Move:	*	*		*		*	*		*		*		*		*	*		*		B
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx		xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx		xxxxx
Shrd ConDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx		xxxxx
Shared LOS:	*	*		*		*	*		*		*		*		*	*		*		*
ApproachDel:	xxxxxx			xxxxxx							xxxxxx							10.7		
ApproachLOS:	*			*							*							B		

Note: Queue reported is the number of cars per lane.

AM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Goldenwest Street at Driveway No. 9 (Golden West College)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.303
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	24	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	1 0	2 0	3	0 0	0 0	0	0 0	1 0	0	0 1
Volume Module:												
Base Vol:	0	1062	34	61	1190	0	0	0	0	24	0	34
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1062	34	61	1190	0	0	0	0	24	0	34
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1062	34	61	1190	0	0	0	0	24	0	34
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1062	34	61	1190	0	0	0	0	24	0	34
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1062	34	61	1190	0	0	0	0	24	0	34
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1062	34	61	1190	0	0	0	0	24	0	34
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.91	0.09	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4942	158	3400	5100	0	0	0	0	1700	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.21	0.21	0.02	0.23	0.00	0.00	0.00	0.00	0.01	0.00	0.02
Crit Moves:					****							****

AM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #10 Goldenwest Street at Driveway No. 8

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: B[10.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 2	1	0	0 0 3	0	0	0 0 0	0	0	0 0 0	0	1
Volume Module:												
Base Vol:	0 1076		36	0 1189		0	0 0		0	0 0		3
Growth Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
Initial Bse:	0 1076		36	0 1189		0	0 0		0	0 0		3
Added Vol:	0 0		0	0 0		0	0 0		0	0 0		0
PasserByVol:	0 0		0	0 0		0	0 0		0	0 0		0
Initial Fut:	0 1076		36	0 1189		0	0 0		0	0 0		3
User Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
PHF Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
PHF Volume:	0 1076		36	0 1189		0	0 0		0	0 0		3
Reduct Vol:	0 0		0	0 0		0	0 0		0	0 0		0
FinalVolume:	0 1076		36	0 1189		0	0 0		0	0 0		3
Critical Gap Module:												
Critical Gp:	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		6.9
FollowUpTim:	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		3.3
Capacity Module:												
Cnflict Vol:	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		377
Potent Cap.:	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		627
Move Cap.:	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		627
Volume/Cap:	xxxx xxxx		xxxx	xxxx xxxx		xxxx	xxxx xxxx		xxxx	xxxx xxxx		0.00
Level Of Service Module:												
2Way95thQ:	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		0.0
Control Del:	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		10.8
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	B
Movement:	LT - LTR		- RT	LT - LTR		- RT	LT - LTR		- RT	LT - LTR		- RT
Shared Cap.:	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx
SharedQueue:	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx
Shrd ConDel:	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			10.8		
ApproachLOS:	*			*			*			B		

Note: Queue reported is the number of cars per lane.

AM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #11 Goldenwest Street at Driveway No. 7

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: B[10.9]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 2	1	0	0 0 3	0	0	0 0 0	0	0	0 0 0	0	1
Volume Module:												
Base Vol:	0	1104	43	0	1189	0	0	0	0	0	0	8
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1104	43	0	1189	0	0	0	0	0	0	8
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1104	43	0	1189	0	0	0	0	0	0	8
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1104	43	0	1189	0	0	0	0	0	0	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	1104	43	0	1189	0	0	0	0	0	0	8
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	390
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	615
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	615
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	0.0
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	10.9
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	B
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			10.9		
ApproachLOS:	*			*			*			B		

Note: Queue reported is the number of cars per lane.

AM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Goldenwest Street at Edinger Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.571
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	2	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	89	927	108	125	978	86	105	942	104	67	443	115
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	89	927	108	125	978	86	105	942	104	67	443	115
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	89	927	108	125	978	86	105	942	104	67	443	115
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	89	927	108	125	978	86	105	942	104	67	443	115
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	89	927	108	125	978	86	105	942	104	67	443	115
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	89	927	108	125	978	86	105	942	104	67	443	115
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.69	0.31	1.00	2.76	0.24	1.00	2.70	0.30	1.00	2.38	0.62
Final Sat.:	1700	4568	532	1700	4688	412	1700	4593	507	1700	4049	1051
Capacity Analysis Module:												
Vol/Sat:	0.05	0.20	0.20	0.07	0.21	0.21	0.06	0.21	0.21	0.04	0.11	0.11
Crit Moves:		****		****				****		****		

AM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Goldenwest Street at Heil Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.500
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	24	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	1	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	77	932	75	93	1082	34	77	585	97	34	322	86
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	77	932	75	93	1082	34	77	585	97	34	322	86
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	77	932	75	93	1082	34	77	585	97	34	322	86
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	77	932	75	93	1082	34	77	585	97	34	322	86
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	77	932	75	93	1082	34	77	585	97	34	322	86
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	77	932	75	93	1082	34	77	585	97	34	322	86
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	5100	1700	1700	5100	1700	1700	3400	1700	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.05	0.18	0.04	0.05	0.21	0.02	0.05	0.17	0.06	0.02	0.09	0.05
Crit Moves:	****				****			****		****		

AM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Driveway No. 6 (Golden West College) at Edinger Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.313
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	18	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	0 1	1 0	0	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	6	0	3	13	1	9	35	1249	15	12	678	57
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	0	3	13	1	9	35	1249	15	12	678	57
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	6	0	3	13	1	9	35	1249	15	12	678	57
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	6	0	3	13	1	9	35	1249	15	12	678	57
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	0	3	13	1	9	35	1249	15	12	678	57
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	6	0	3	13	1	9	35	1249	15	12	678	57
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	1.00	0.10	0.90	1.00	2.96	0.04	1.00	2.77	0.23
Final Sat.:	1700	0	1700	1700	170	1530	1700	5039	61	1700	4704	396
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.25	0.25	0.01	0.14	0.14
Crit Moves:		****		****				****		****		

AM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

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Intersection #15 Driveway No. 5 at Edinger Avenue

****

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: B[10.1]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0	0 0	0	0 0 0	0 1		0 0 3	0 0		0 0 2	1 0	
Volume Module:												
Base Vol:	0	0	0	0	0	4	0	1174	0	0	767	61
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	4	0	1174	0	0	767	61
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	0	4	0	1174	0	0	767	61
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	4	0	1174	0	0	767	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	4	0	1174	0	0	767	61
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	286	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	717	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	717	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	0.0	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	10.1	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	B	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			10.1			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

****

Note: Queue reported is the number of cars per lane.

****

AM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #16 Driveway No. 4 at Edinger Avenue

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: E[35.3]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 1			0 0 1! 0 0			1 0 2 1 0			1 0 2 1 0		
Volume Module:												
Base Vol:	0	0	5	6	0	1	38	1131	5	5	822	69
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	5	6	0	1	38	1131	5	5	822	69
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	5	6	0	1	38	1131	5	5	822	69
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	5	6	0	1	38	1131	5	5	822	69
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	5	6	0	1	38	1131	5	5	822	69
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	380	1320	2079	309	891	xxxx	xxxxx	1136	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	624	117	54	693	769	xxxx	xxxxx	622	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	624	111	51	693	769	xxxx	xxxxx	622	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.01	0.05	0.00	0.00	0.05	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	0.0	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	10.8	xxxxx	xxxx	xxxxx	9.9	xxxx	xxxxx	10.8	xxxx	xxxxx
LOS by Move:	*	*	B	*	*	*	A	*	*	B	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	126	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	35.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	E	*	*	*	*	*	*	*
ApproachDel:		10.8			35.3			xxxxxx			xxxxxx	
ApproachLOS:		B			E			*			*	

Note: Queue reported is the number of cars per lane.

AM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Vermont Street/Gothard Street at McFadden Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.522
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	25	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	0	1	0	0	1! 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	128	0	141	56	0	4	6	405	270	264	500	26
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	128	0	141	56	0	4	6	405	270	264	500	26
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	128	0	141	56	0	4	6	405	270	264	500	26
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	128	0	141	56	0	4	6	405	270	264	500	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	128	0	141	56	0	4	6	405	270	264	500	26
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	128	0	141	56	0	4	6	405	270	264	500	26
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.93	0.00	0.07	1.00	1.20	0.80	1.00	1.90	0.10
Final Sat.:	3400	0	1700	1587	0	113	1700	2040	1360	1700	3232	168
Capacity Analysis Module:												
Vol/Sat:	0.04	0.00	0.08	0.04	0.00	0.04	0.00	0.20	0.20	0.16	0.15	0.15
Crit Moves:			****			****		****		****		

AM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #18 Gothard Street at Driveway No. 1

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: B[11.1]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 2	0	0	0 0 1	1	0	1 0 0	0	1	0 0 0	0	0
Volume Module:												
Base Vol:	24	325	0	0	425	155	23	0	29	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	24	325	0	0	425	155	23	0	29	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	24	325	0	0	425	155	23	0	29	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	24	325	0	0	425	155	23	0	29	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	24	325	0	0	425	155	23	0	29	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	xxxx	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	580	xxxx	xxxxx	xxxx	xxxx	xxxxx	713	xxxx	290	xxxx	xxxx	xxxxx
Potent Cap.:	1004	xxxx	xxxxx	xxxx	xxxx	xxxxx	371	xxxx	713	xxxx	xxxx	xxxxx
Move Cap.:	1004	xxxx	xxxxx	xxxx	xxxx	xxxxx	364	xxxx	713	xxxx	xxxx	xxxxx
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	520	451	xxxxx	531	413	xxxxx
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	0.04	xxxx	0.04	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	0.1	xxxx	xxxx	xxxxx
Control Del:	8.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	12.2	xxxx	10.3	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	B	*	B	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			11.1			xxxxxx		
ApproachLOS:	*			*			B			*		

Note: Queue reported is the number of cars per lane.

AM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #19 Gothard Street at Driveway No. 2/Center Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.309
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	18	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	0	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	53	258	121	126	296	46	16	8	11	105	54	91
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	53	258	121	126	296	46	16	8	11	105	54	91
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	53	258	121	126	296	46	16	8	11	105	54	91
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	53	258	121	126	296	46	16	8	11	105	54	91
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	53	258	121	126	296	46	16	8	11	105	54	91
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	53	258	121	126	296	46	16	8	11	105	54	91
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.36	0.64	1.00	1.73	0.27	1.00	0.42	0.58	1.00	1.00	1.00
Final Sat.:	1700	2315	1085	1700	2943	457	1700	716	984	1700	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.03	0.11	0.11	0.07	0.10	0.10	0.01	0.01	0.01	0.06	0.03	0.05
Crit Moves:		****		****				****		****		

AM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #20 Gothard Street at Driveway No. 3

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: B[11.3]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 2	0 0		0 0 1	1 0		0 0 1!	0 0		0 0 0	0 0	
Volume Module:												
Base Vol:	19	435	0	0	407	9	5	0	9	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	19	435	0	0	407	9	5	0	9	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	19	435	0	0	407	9	5	0	9	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	19	435	0	0	407	9	5	0	9	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	19	435	0	0	407	9	5	0	9	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	416	xxxx	xxxxx	xxxx	xxxx	xxxxx	667	885	208	xxxx	xxxx	xxxxx
Potent Cap.:	1154	xxxx	xxxxx	xxxx	xxxx	xxxxx	397	286	804	xxxx	xxxx	xxxxx
Move Cap.:	1154	xxxx	xxxxx	xxxx	xxxx	xxxxx	392	282	804	xxxx	xxxx	xxxxx
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	0.00	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	584	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	11.3	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			11.3			xxxxxx		
ApproachLOS:	*			*			B			*		

Note: Queue reported is the number of cars per lane.

AM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #21 Gothard Street at Edinger Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.505
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	24	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	80	337	114	82	263	92	50	983	111	151	460	63
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	337	114	82	263	92	50	983	111	151	460	63
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	80	337	114	82	263	92	50	983	111	151	460	63
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	337	114	82	263	92	50	983	111	151	460	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	337	114	82	263	92	50	983	111	151	460	63
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	337	114	82	263	92	50	983	111	151	460	63
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.48	0.52	1.00	2.70	0.30	1.00	2.64	0.36
Final Sat.:	1700	3400	1700	1700	2519	881	1700	4583	517	1700	4486	614
Capacity Analysis Module:												
Vol/Sat:	0.05	0.10	0.07	0.05	0.10	0.10	0.03	0.21	0.21	0.09	0.10	0.10
Crit Moves:	****				****			****		****		

AM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #22 Gothard Street at Heil Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.450
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	22	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	95	434	96	34	368	22	75	568	179	117	338	57
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	95	434	96	34	368	22	75	568	179	117	338	57
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	95	434	96	34	368	22	75	568	179	117	338	57
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	95	434	96	34	368	22	75	568	179	117	338	57
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	95	434	96	34	368	22	75	568	179	117	338	57
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	95	434	96	34	368	22	75	568	179	117	338	57
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	3400	1700	1700	3400	1700	1700	3400	1700	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.06	0.13	0.06	0.02	0.11	0.01	0.04	0.17	0.11	0.07	0.10	0.03
Crit Moves:	****				****			****		****		

AM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #23 I-405 SB Ramps at Center Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.503
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	24	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Permitted		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 0	2 0	0	0 1	1 0	2	0 0	0 0	2	0 1
Volume Module:												
Base Vol:	0	0	0	447	0	68	85	183	0	0	398	462
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	447	0	68	85	183	0	0	398	462
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	447	0	68	85	183	0	0	398	462
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	447	0	68	85	183	0	0	398	462
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	447	0	68	85	183	0	0	398	462
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	447	0	68	85	183	0	0	398	462
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	3400	0	1700	1700	3400	0	0	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.00	0.04	0.05	0.05	0.00	0.00	0.12	0.27
Crit Moves:				****			****					****

AM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #24 Beach Boulevard at McFadden Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.736
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	2 0	3 1	0	2 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	129	1864	144	190	2377	333	264	357	118	373	468	115
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	129	1864	144	190	2377	333	264	357	118	373	468	115
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	129	1864	144	190	2377	333	264	357	118	373	468	115
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	129	1864	144	190	2377	333	264	357	118	373	468	115
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	129	1864	144	190	2377	333	264	357	118	373	468	115
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	129	1864	144	190	2377	333	264	357	118	373	468	115
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.71	0.29	2.00	3.51	0.49	2.00	1.50	0.50	2.00	1.61	0.39
Final Sat.:	3400	6312	488	3400	5964	836	3400	2555	845	3400	2729	671
Capacity Analysis Module:												
Vol/Sat:	0.04	0.30	0.30	0.06	0.40	0.40	0.08	0.14	0.14	0.11	0.17	0.17
Crit Moves:	****				****			****		****		

AM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #25 Beach Boulevard at Center Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.596
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4	0 0	0 0	4	0 1	2 0	0	0 2	0 0	0	0 0
Volume Module:												
Base Vol:	0	1978	0	0	2841	850	77	0	436	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1978	0	0	2841	850	77	0	436	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1978	0	0	2841	850	77	0	436	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1978	0	0	2841	0	77	0	436	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1978	0	0	2841	0	77	0	436	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1978	0	0	2841	0	77	0	436	0	0	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.00	0.00	0.00	4.00	1.00	2.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	0	6800	0	0	6800	1700	3400	0	3400	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.29	0.00	0.00	0.42	0.00	0.02	0.00	0.13	0.00	0.00	0.00
Crit Moves:	****				****				****			

AM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #26 Beach Boulevard at Edinger Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.670
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	4 0	2	2 0	3 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	113	1499	259	430	2284	522	193	765	110	121	492	260
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	113	1499	259	430	2284	522	193	765	110	121	492	260
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	113	1499	259	430	2284	522	193	765	110	121	492	260
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	113	1499	259	430	2284	522	193	765	110	121	492	260
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	113	1499	259	430	2284	522	193	765	110	121	492	260
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	113	1499	259	430	2284	522	193	765	110	121	492	260
OvlAdjVol:						329			54			
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	4.00	2.00	2.00	3.00	1.00	2.00	2.00	1.00
Final Sat.:	3400	5100	1700	3400	6800	3400	3400	5100	1700	3400	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.03	0.29	0.15	0.13	0.34	0.15	0.06	0.15	0.06	0.04	0.14	0.15
OvlAdjV/S:						0.10			0.03			
Crit Moves:		****			****			****			****	

PM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Edwards Street at McFadden Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.495
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	23	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	2	0 1
Volume Module:												
Base Vol:	61	556	61	78	564	69	108	599	139	71	542	106
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	61	556	61	78	564	69	108	599	139	71	542	106
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	61	556	61	78	564	69	108	599	139	71	542	106
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	61	556	61	78	564	69	108	599	139	71	542	106
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	61	556	61	78	564	69	108	599	139	71	542	106
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	61	556	61	78	564	69	108	599	139	71	542	106
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.80	0.20	1.00	1.78	0.22	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	3064	336	1700	3029	371	1700	3400	1700	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.18	0.18	0.05	0.19	0.19	0.06	0.18	0.08	0.04	0.16	0.06
Crit Moves:	****				****		****				****	

PM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Edwards Street at Edinger Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.517
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	24	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	3 0	1	1 0	3 0	1
Volume Module:												
Base Vol:	93	492	115	96	483	106	82	721	91	102	974	150
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	93	492	115	96	483	106	82	721	91	102	974	150
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	93	492	115	96	483	106	82	721	91	102	974	150
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	93	492	115	96	483	106	82	721	91	102	974	150
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	93	492	115	96	483	106	82	721	91	102	974	150
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	93	492	115	96	483	106	82	721	91	102	974	150
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.64	0.36	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1700	3400	1700	1700	2788	612	1700	5100	1700	1700	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.05	0.14	0.07	0.06	0.17	0.17	0.05	0.14	0.05	0.06	0.19	0.09
Crit Moves:	****				****		****				****	

PM Existing
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Goldenwest Street at I-405 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.568
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3	0 0	0 0	2	0 1	1 0	1!	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	0	1951	0	0	787	468	276	0	413	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1951	0	0	787	468	276	0	413	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1951	0	0	787	468	276	0	413	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1951	0	0	787	0	276	0	413	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1951	0	0	787	0	276	0	413	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1951	0	0	787	0	276	0	413	0	0	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	0.00	0.00	2.00	1.00	1.20	0.00	1.80	0.00	0.00	0.00
Final Sat.:	0	5100	0	0	3400	1700	2043	0	3057	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.38	0.00	0.00	0.23	0.00	0.14	0.00	0.14	0.00	0.00	0.00
Crit Moves:		****			****			****				

PM Existing
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Goldenwest Street at Bolsa Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.787
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	1 0	2 1	0	2 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	221	1304	234	111	978	77	221	890	131	282	663	518
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	221	1304	234	111	978	77	221	890	131	282	663	518
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	221	1304	234	111	978	77	221	890	131	282	663	518
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	221	1304	234	111	978	77	221	890	131	282	663	518
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	221	1304	234	111	978	77	221	890	131	282	663	518
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	221	1304	234	111	978	77	221	890	131	282	663	518
OvlAdjVol:									20			
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.54	0.46	1.00	2.78	0.22	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	4324	776	1700	4728	372	3400	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.07	0.30	0.30	0.07	0.21	0.21	0.07	0.17	0.08	0.08	0.13	0.30
OvlAdjV/S:									0.01			
Crit Moves:		****			****			****				****

PM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Goldenwest Street at McFadden Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.704
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	201	1144	93	193	1197	76	138	521	97	162	488	349
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	201	1144	93	193	1197	76	138	521	97	162	488	349
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	201	1144	93	193	1197	76	138	521	97	162	488	349
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	201	1144	93	193	1197	76	138	521	97	162	488	349
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	201	1144	93	193	1197	76	138	521	97	162	488	349
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	201	1144	93	193	1197	76	138	521	97	162	488	349
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.82	0.18	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	5100	1700	1700	4796	304	1700	3400	1700	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.12	0.22	0.05	0.11	0.25	0.25	0.08	0.15	0.06	0.10	0.14	0.21
Crit Moves:	****				****		****					****

PM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #6 Goldenwest Street at Driveway No. 12

****

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: B[12.7]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 2	1	0	0 0 3	0	0	0 0 0	0	0	0 0 0	0	1
Volume Module:												
Base Vol:	0	1466	12	0	1539	0	0	0	0	0	0	57
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1466	12	0	1539	0	0	0	0	0	0	57
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1466	12	0	1539	0	0	0	0	0	0	57
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1466	12	0	1539	0	0	0	0	0	0	57
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	1466	12	0	1539	0	0	0	0	0	0	57
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	495
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	526
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	526
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.11
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	0.4
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	12.7
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	B
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			12.7		
ApproachLOS:	*			*			*			B		

****

Note: Queue reported is the number of cars per lane.

****

PM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #7 Goldenwest Street at Driveway No. 11

Average Delay (sec/veh): 5.0 Worst Case Level Of Service: F[222.4]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	1	0	2	1	0	1	0	2	1	0	0	0	1!	0	0	0	0	1!	0	0
Volume Module:																				
Base Vol:	19	1434		24		161	1370		8		1		0		13	14		0		41
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	19	1434		24		161	1370		8		1		0		13	14		0		41
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Volume:	19	1434		24		161	1370		8		1		0		13	14		0		41
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0		0
FinalVolume:	19	1434		24		161	1370		8		1		0		13	14		0		41
Critical Gap Module:																				
Critical Gp:	4.1	xxxx	xxxxx			4.1	xxxx	xxxxx			7.5		6.5		6.9	7.5		6.5		6.9
FollowUpTim:	2.2	xxxx	xxxxx			2.2	xxxx	xxxxx			3.5		4.0		3.3	3.5		4.0		3.3
Capacity Module:																				
Cnflict Vol:	1378	xxxx	xxxxx			1458	xxxx	xxxxx			2212		3192		461	2263		3184		490
Potent Cap.:	504	xxxx	xxxxx			470	xxxx	xxxxx			25		10		553	23		10		529
Move Cap.:	504	xxxx	xxxxx			470	xxxx	xxxxx			16		7		553	16		7		529
Volume/Cap:	0.04	xxxx	xxxx			0.34	xxxx	xxxx			0.06		0.00		0.02	0.88		0.00		0.08
Level Of Service Module:																				
2Way95thQ:	0.1	xxxx	xxxxx			1.5	xxxx	xxxxx			xxxx		xxxx		xxxxx	xxxx		xxxx		xxxxx
Control Del:	12.4	xxxx	xxxxx			16.6	xxxx	xxxxx			xxxxx		xxxx		xxxxx	xxxxx		xxxx		xxxxx
LOS by Move:	B	*		*		C	*		*		*		*		*	*		*		*
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx		166		xxxxx	xxxx		57		xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		0.3		xxxxx	xxxxx		4.4		xxxxx
Shrd ConDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		28.7		xxxxx	xxxxx		222		xxxxx
Shared LOS:	*	*		*		*	*		*		*		D		*	*		F		*
ApproachDel:	xxxxxx					xxxxxx					28.7					222.4				
ApproachLOS:	*					*					D					F				

Note: Queue reported is the number of cars per lane.

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PM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #8 Goldenwest Street at Driveway No. 10

****

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: B[12.9]

****

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	2	1	0		0	0	3	0	0		0	0	0	0	0		0	0	0	0	1	
Volume Module:																								
Base Vol:	0	1431		7			0	1305		0			0	0		0			0	0		0		79
Growth Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		1.00
Initial Bse:	0	1431		7			0	1305		0			0	0		0			0	0		0		79
Added Vol:	0	0		0			0	0		0			0	0		0			0	0		0		0
PasserByVol:	0	0		0			0	0		0			0	0		0			0	0		0		0
Initial Fut:	0	1431		7			0	1305		0			0	0		0			0	0		0		79
User Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		1.00
PHF Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		1.00
PHF Volume:	0	1431		7			0	1305		0			0	0		0			0	0		0		79
Reduct Vol:	0	0		0			0	0		0			0	0		0			0	0		0		0
FinalVolume:	0	1431		7			0	1305		0			0	0		0			0	0		0		79
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx				6.9
FollowUpTim:	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx				3.3
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx				481
Potent Cap.:	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx				537
Move Cap.:	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx				537
Volume/Cap:	xxxx	xxxx		xxxx			xxxx	xxxx		xxxx			xxxx	xxxx		xxxx			xxxx	xxxx				0.15
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx				0.5
Control Del:	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx				12.9
LOS by Move:	*	*		*			*	*		*			*	*		*			*	*				B
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx		
SharedQueue:	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx		
Shrd ConDel:	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx		
Shared LOS:	*	*		*			*	*		*			*	*		*			*	*		*		
ApproachDel:	xxxxxx				xxxxxx						xxxxxx							12.9						
ApproachLOS:	*				*						*							B						

****

Note: Queue reported is the number of cars per lane.

****

PM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Goldenwest Street at Driveway No. 9 (Golden West College)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.385
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	20	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0 2	1	0	2 0	3	0 0	0 0	0	0 0	1 0	0	0 1
Volume Module:												
Base Vol:	0	1375	42	70	1235	0	0	0	0	58	0	62
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1375	42	70	1235	0	0	0	0	58	0	62
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1375	42	70	1235	0	0	0	0	58	0	62
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1375	42	70	1235	0	0	0	0	58	0	62
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1375	42	70	1235	0	0	0	0	58	0	62
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1375	42	70	1235	0	0	0	0	58	0	62
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.91	0.09	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4949	151	3400	5100	0	0	0	0	1700	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.28	0.28	0.02	0.24	0.00	0.00	0.00	0.00	0.03	0.00	0.04
Crit Moves:		****		****								****

PM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #10 Goldenwest Street at Driveway No. 8

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[12.0]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	2	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	1
Volume Module:																				
Base Vol:	0	1417		27		0	1380		0		0		0		0	0		0		18
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	0	1417		27		0	1380		0		0		0		0	0		0		18
Added Vol:	0	0		0		0	0		0		0		0		0	0		0		0
PasserByVol:	0	0		0		0	0		0		0		0		0	0		0		0
Initial Fut:	0	1417		27		0	1380		0		0		0		0	0		0		18
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Volume:	0	1417		27		0	1380		0		0		0		0	0		0		18
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0		0
FinalVolume:	0	1417		27		0	1380		0		0		0		0	0		0		18
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx		6.9
FollowUpTim:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx		3.3
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx		486
Potent Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx		533
Move Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx		533
Volume/Cap:	xxxx	xxxx		xxxx		xxxx	xxxx		xxxx		xxxx		xxxx		xxxx	xxxx		xxxx		0.03
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx		0.1
Control Del:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx		12.0
LOS by Move:	*	*		*		*	*		*		*		*		*	*		*		B
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx		xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx		xxxxx
Shrd ConDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx		xxxxx
Shared LOS:	*	*		*		*	*		*		*		*		*	*		*		*
ApproachDel:	xxxxxx			xxxxxx							xxxxxx							12.0		
ApproachLOS:	*			*							*							B		

Note: Queue reported is the number of cars per lane.

PM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #11 Goldenwest Street at Driveway No. 7

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[12.0]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	2	1	0		0	0	3	0	0		0	0	0	0	0		0	0	0	0	1	
Volume Module:																								
Base Vol:	0	1418		16			0	1380		0			0		0		0		0		0		26	
Growth Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	0	1418		16			0	1380		0			0		0		0		0		0		26	
Added Vol:	0	0		0			0	0		0			0		0		0		0		0		0	
PasserByVol:	0	0		0			0	0		0			0		0		0		0		0		0	
Initial Fut:	0	1418		16			0	1380		0			0		0		0		0		0		26	
User Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
PHF Volume:	0	1418		16			0	1380		0			0		0		0		0		0		26	
Reduct Vol:	0	0		0			0	0		0			0		0		0		0		0		0	
FinalVolume:	0	1418		16			0	1380		0			0		0		0		0		0		26	
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		6.9	
FollowUpTim:	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		3.3	
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		481	
Potent Cap.:	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		537	
Move Cap.:	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		537	
Volume/Cap:	xxxx	xxxx		xxxx			xxxx	xxxx		xxxx			xxxx	xxxx		xxxx			xxxx	xxxx		0.05	
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		0.2	
Control Del:	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		12.0	
LOS by Move:	*	*		*			*	*		*			*	*		*			*	*		B	
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx		
SharedQueue:	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx		
Shrd ConDel:	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx		
Shared LOS:	*	*		*			*	*		*			*	*		*			*	*		*		
ApproachDel:	xxxxxx						xxxxxx						xxxxxx						12.0					
ApproachLOS:	*						*						*						B					

Note: Queue reported is the number of cars per lane.

PM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Goldenwest Street at Edinger Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.669
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	2	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	132	1198	76	135	1124	121	98	830	101	80	1046	138
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	132	1198	76	135	1124	121	98	830	101	80	1046	138
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	132	1198	76	135	1124	121	98	830	101	80	1046	138
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	132	1198	76	135	1124	121	98	830	101	80	1046	138
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	132	1198	76	135	1124	121	98	830	101	80	1046	138
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	132	1198	76	135	1124	121	98	830	101	80	1046	138
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.82	0.18	1.00	2.71	0.29	1.00	2.67	0.33	1.00	2.65	0.35
Final Sat.:	1700	4796	304	1700	4604	496	1700	4547	553	1700	4506	594
Capacity Analysis Module:												
Vol/Sat:	0.08	0.25	0.25	0.08	0.24	0.24	0.06	0.18	0.18	0.05	0.23	0.23
Crit Moves:		****			****			****			****	

PM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Goldenwest Street at Heil Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.535
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	25	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	1	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	118	1155	108	86	1111	71	80	467	89	102	511	134
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	118	1155	108	86	1111	71	80	467	89	102	511	134
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	118	1155	108	86	1111	71	80	467	89	102	511	134
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	118	1155	108	86	1111	71	80	467	89	102	511	134
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	118	1155	108	86	1111	71	80	467	89	102	511	134
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	118	1155	108	86	1111	71	80	467	89	102	511	134
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	5100	1700	1700	5100	1700	1700	3400	1700	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.07	0.23	0.06	0.05	0.22	0.04	0.05	0.14	0.05	0.06	0.15	0.08
Crit Moves:	****				****			****		****		

PM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Driveway No. 6 (Golden West College) at Edinger Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.360
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	19	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	1 0	1	0 0	1 0	1	0 2	1 0	1	0 2	1 0
Volume Module:												
Base Vol:	83	1	29	30	3	8	21	959	55	69	1174	63
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	83	1	29	30	3	8	21	959	55	69	1174	63
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	83	1	29	30	3	8	21	959	55	69	1174	63
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	83	1	29	30	3	8	21	959	55	69	1174	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	83	1	29	30	3	8	21	959	55	69	1174	63
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	83	1	29	30	3	8	21	959	55	69	1174	63
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.49	0.51	1.00	0.27	0.73	1.00	2.84	0.16	1.00	2.85	0.15
Final Sat.:	1700	827	873	1700	464	1236	1700	4823	277	1700	4840	260
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.03	0.02	0.01	0.01	0.01	0.20	0.20	0.04	0.24	0.24
Crit Moves:	****				****		****				****	

PM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #15 Driveway No. 5 at Edinger Avenue

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[11.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0	0 0	0	0 0 0	0 1		0 0 3	0 0		0 0 2	1 0	
Volume Module:												
Base Vol:	0	0	0	0	0	23	0	1075	0	0	1305	16
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	23	0	1075	0	0	1305	16
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	0	23	0	1075	0	0	1305	16
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	23	0	1075	0	0	1305	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	23	0	1075	0	0	1305	16
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	443	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	568	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	568	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	0.04	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	0.1	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	11.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	B	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			11.6			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

Note: Queue reported is the number of cars per lane.

PM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #16 Driveway No. 4 at Edinger Avenue

Average Delay (sec/veh): 1.5 Worst Case Level Of Service: F[102.9]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	0	1	0	0	1!	0	0	1	0	2	1	0	1	0	2	1	0
Volume Module:																				
Base Vol:	0	0			5	28	0			5	9	1061			5	5	1311			45
Growth Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00
Initial Bse:	0	0			5	28	0			5	9	1061			5	5	1311			45
Added Vol:	0	0			0	0	0			0	0	0			0	0	0			0
PasserByVol:	0	0			0	0	0			0	0	0			0	0	0			0
Initial Fut:	0	0			5	28	0			5	9	1061			5	5	1311			45
User Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00
PHF Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00
PHF Volume:	0	0			5	28	0			5	9	1061			5	5	1311			45
Reduct Vol:	0	0			0	0	0			0	0	0			0	0	0			0
FinalVolume:	0	0			5	28	0			5	9	1061			5	5	1311			45
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx			6.9	7.5	6.5			6.9	4.1	xxxx	xxxxx			4.1	xxxx	xxxxx		
FollowUpTim:	xxxxx	xxxx			3.3	3.5	4.0			3.3	2.2	xxxx	xxxxx			2.2	xxxx	xxxxx		
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx			356	1715	2428			460	1356	xxxx	xxxxx			1066	xxxx	xxxxx		
Potent Cap.:	xxxx	xxxx			646	59	33			554	514	xxxx	xxxxx			661	xxxx	xxxxx		
Move Cap.:	xxxx	xxxx			646	58	32			554	514	xxxx	xxxxx			661	xxxx	xxxxx		
Volume/Cap:	xxxx	xxxx			0.01	0.48	0.00			0.01	0.02	xxxx	xxxx			0.01	xxxx	xxxx		
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx			0.0	xxxx	xxxx			xxxxx	0.1	xxxx	xxxxx			0.0	xxxx	xxxxx		
Control Del:	xxxxx	xxxx			10.6	xxxxx	xxxx			xxxxx	12.1	xxxx	xxxxx			10.5	xxxx	xxxxx		
LOS by Move:	*	*			B	*	*			*	B	*	*			B	*	*		
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx			xxxxx	xxxx		67		xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx
SharedQueue:	xxxxx	xxxx			xxxxx	xxxxx		2.0		xxxxx	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx
Shrd ConDel:	xxxxx	xxxx			xxxxx	xxxxx		103		xxxxx	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx
Shared LOS:	*	*			*	*		F		*	*	*			*	*	*			*
ApproachDel:		10.6					102.9					xxxxxx					xxxxxx			
ApproachLOS:		B					F					*					*			

Note: Queue reported is the number of cars per lane.

PM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Vermont Street/Gothard Street at McFadden Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.674
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	0	0 1	0	0	1! 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	457	0	394	42	0	2	2	533	346	183	593	56
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	457	0	394	42	0	2	2	533	346	183	593	56
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	457	0	394	42	0	2	2	533	346	183	593	56
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	457	0	394	42	0	2	2	533	346	183	593	56
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	457	0	394	42	0	2	2	533	346	183	593	56
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	457	0	394	42	0	2	2	533	346	183	593	56
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.95	0.00	0.05	1.00	1.21	0.79	1.00	1.83	0.17
Final Sat.:	3400	0	1700	1623	0	77	1700	2062	1338	1700	3107	293
Capacity Analysis Module:												
Vol/Sat:	0.13	0.00	0.23	0.03	0.00	0.03	0.00	0.26	0.26	0.11	0.19	0.19
Crit Moves:			****	****				****		****		

PM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #18 Gothard Street at Driveway No. 1

****

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: B[12.2]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 2	0	0	0 0 1	1	0	1 0 0	0	1	0 0 0	0	0
Volume Module:												
Base Vol:	11	765	0	0	410	48	90	0	67	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	11	765	0	0	410	48	90	0	67	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	11	765	0	0	410	48	90	0	67	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	11	765	0	0	410	48	90	0	67	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	11	765	0	0	410	48	90	0	67	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	xxxx	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	458	xxxx	xxxxx	xxxx	xxxx	xxxxx	839	xxxx	229	xxxx	xxxx	xxxxx
Potent Cap.:	1114	xxxx	xxxxx	xxxx	xxxx	xxxxx	309	xxxx	780	xxxx	xxxx	xxxxx
Move Cap.:	1114	xxxx	xxxxx	xxxx	xxxx	xxxxx	306	xxxx	780	xxxx	xxxx	xxxxx
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	498	347	xxxxx	322	342	xxxxx
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.18	xxxx	0.09	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.7	xxxx	0.3	xxxx	xxxx	xxxxx
Control Del:	8.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	13.8	xxxx	10.1	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	B	*	B	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			12.2			xxxxxx		
ApproachLOS:	*			*			B			*		

****

Note: Queue reported is the number of cars per lane.

****

PM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

****

Intersection #19 Gothard Street at Driveway No. 2/Center Avenue

****

Cycle (sec):	100	Critical Vol./Cap.(X):	0.648
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	B

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	0	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	10	480	232	178	268	7	28	50	36	397	43	286
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	480	232	178	268	7	28	50	36	397	43	286
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	10	480	232	178	268	7	28	50	36	397	43	286
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	10	480	232	178	268	7	28	50	36	397	43	286
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	480	232	178	268	7	28	50	36	397	43	286
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	10	480	232	178	268	7	28	50	36	397	43	286
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.35	0.65	1.00	1.95	0.05	1.00	0.58	0.42	1.00	1.00	1.00
Final Sat.:	1700	2292	1108	1700	3313	87	1700	988	712	1700	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.01	0.21	0.21	0.10	0.08	0.08	0.02	0.05	0.05	0.23	0.03	0.17
Crit Moves:		****		****				****		****		

****

PM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #20 Gothard Street at Driveway No. 3

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[11.9]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 2	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	7	728	0	0	746	0	1	0	11	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	7	728	0	0	746	0	1	0	11	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	7	728	0	0	746	0	1	0	11	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	7	728	0	0	746	0	1	0	11	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	7	728	0	0	746	0	1	0	11	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	746	xxxx	xxxxx	xxxx	xxxx	xxxxx	1124	1488	373	xxxx	xxxx	xxxxx
Potent Cap.:	871	xxxx	xxxxx	xxxx	xxxx	xxxxx	202	125	630	xxxx	xxxx	xxxxx
Move Cap.:	871	xxxx	xxxxx	xxxx	xxxx	xxxxx	201	124	630	xxxx	xxxx	xxxxx
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.00	0.00	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	535	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	11.9	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			11.9			xxxxxx		
ApproachLOS:	*			*			B			*		

Note: Queue reported is the number of cars per lane.

PM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #21 Gothard Street at Edinger Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.638
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxx
Optimal Cycle:	32	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	129	578	180	199	481	128	124	759	93	120	1035	130
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	129	578	180	199	481	128	124	759	93	120	1035	130
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	129	578	180	199	481	128	124	759	93	120	1035	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	129	578	180	199	481	128	124	759	93	120	1035	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	129	578	180	199	481	128	124	759	93	120	1035	130
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	129	578	180	199	481	128	124	759	93	120	1035	130
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.58	0.42	1.00	2.67	0.33	1.00	2.67	0.33
Final Sat.:	1700	3400	1700	1700	2685	715	1700	4543	557	1700	4531	569
Capacity Analysis Module:												
Vol/Sat:	0.08	0.17	0.11	0.12	0.18	0.18	0.07	0.17	0.17	0.07	0.23	0.23
Crit Moves:		****		****			****				****	

PM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #22 Gothard Street at Heil Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.520
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	25	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	153	781	162	60	563	109	93	474	110	111	537	72
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	153	781	162	60	563	109	93	474	110	111	537	72
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	153	781	162	60	563	109	93	474	110	111	537	72
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	153	781	162	60	563	109	93	474	110	111	537	72
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	153	781	162	60	563	109	93	474	110	111	537	72
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	153	781	162	60	563	109	93	474	110	111	537	72
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	3400	1700	1700	3400	1700	1700	3400	1700	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.09	0.23	0.10	0.04	0.17	0.06	0.05	0.14	0.06	0.07	0.16	0.04
Crit Moves:		****		****				****		****		

PM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #23 I-405 SB Ramps at Center Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.824
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	57	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Permitted		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 0	2 0	0	0 1	1 0	2	0 0	0 0	2	0 1
Volume Module:												
Base Vol:	0	0	0	710	0	286	415	552	0	0	414	545
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	710	0	286	415	552	0	0	414	545
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	710	0	286	415	552	0	0	414	545
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	710	0	286	415	552	0	0	414	545
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	710	0	286	415	552	0	0	414	545
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	710	0	286	415	552	0	0	414	545
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	3400	0	1700	1700	3400	0	0	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.21	0.00	0.17	0.24	0.16	0.00	0.00	0.12	0.32
Crit Moves:				****			****					****

PM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #24 Beach Boulevard at McFadden Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.751
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	2 0	3 1	0	2 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	152	2426	286	179	1600	187	318	392	133	324	307	118
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	152	2426	286	179	1600	187	318	392	133	324	307	118
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	152	2426	286	179	1600	187	318	392	133	324	307	118
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	152	2426	286	179	1600	187	318	392	133	324	307	118
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	152	2426	286	179	1600	187	318	392	133	324	307	118
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	152	2426	286	179	1600	187	318	392	133	324	307	118
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.58	0.42	2.00	3.58	0.42	2.00	1.49	0.51	2.00	1.44	0.56
Final Sat.:	3400	6083	717	3400	6088	712	3400	2539	861	3400	2456	944
Capacity Analysis Module:												
Vol/Sat:	0.04	0.40	0.40	0.05	0.26	0.26	0.09	0.15	0.15	0.10	0.13	0.13
Crit Moves:		****		****				****		****		

PM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #25 Beach Boulevard at Center Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.701
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 0	0	0 0	4 0	1	2 0	0 0	2	0 0	0 0	0
Volume Module:												
Base Vol:	0	2460	0	0	2218	948	284	0	983	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2460	0	0	2218	948	284	0	983	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	2460	0	0	2218	948	284	0	983	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2460	0	0	2218	0	284	0	983	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2460	0	0	2218	0	284	0	983	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2460	0	0	2218	0	284	0	983	0	0	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.00	0.00	0.00	4.00	1.00	2.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	0	6800	0	0	6800	1700	3400	0	3400	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.36	0.00	0.00	0.33	0.00	0.08	0.00	0.29	0.00	0.00	0.00
Crit Moves:		****		****					****			

PM Existing
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #26 Beach Boulevard at Edinger Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.786
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	4 0	2	2 0	3 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	321	1854	494	346	2266	549	291	718	225	261	631	213
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	321	1854	494	346	2266	549	291	718	225	261	631	213
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	321	1854	494	346	2266	549	291	718	225	261	631	213
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	321	1854	494	346	2266	549	291	718	225	261	631	213
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	321	1854	494	346	2266	549	291	718	225	261	631	213
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	321	1854	494	346	2266	549	291	718	225	261	631	213
OvlAdjVol:						258			65			
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	4.00	2.00	2.00	3.00	1.00	2.00	2.00	1.00
Final Sat.:	3400	5100	1700	3400	6800	3400	3400	5100	1700	3400	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.09	0.36	0.29	0.10	0.33	0.16	0.09	0.14	0.13	0.08	0.19	0.13
OvlAdjV/S:						0.08			0.04			
Crit Moves:		****			****			****			****	

APPENDIX C

BOYS AND GIRLS CLUB AFTER SCHOOL BUILDING TRIP GENERATION TABLE

Table A: Boys and Girls Club of Huntington Valley (BGCHV) Project Trip Generation

Land Use	Size	Unit	ADT	AM Peak			PM Peak		
				In	Out	Total	In	Out	Total
Trip Generation									
BGCHV Attendees[1, 2]	225	Students	268	0	0	0	113	113	226
BGCHV Employees[3]	17	Staff	34	2	0	2	0	8	8
Trip Reduction									
On-Site Students[4] (20%)	45	Students	-44	-	-	-	-22	-22	-44
Net Trip Generation			**258**	**2**	**0**	**2**	**91**	**99**	**190**

Notes:

[1] Each parent would pick up at minimum 2 students per vehicle, typically between 4 p.m. and 6 p.m. (PM Peak Hours), BGCHV, 2014.

[2] ADT includes 14 mid-day bus trips (PCE factor of 3.0 vehicles per bus = 42 PCEs), BGCHV, 2014.

[3] Approximately 2 staff arrive in AM Peak Hours, 8 staff leave in PM Peak Hours, and the remaining staff leave after 6:30 p.m., BGCHV, 2014.

[4] Approximately 20% of the students' parents are employees of the Child Development Center or BGCHV, Golden West College students or employess (on-site), BGCHV, 2014.

ADT = Average Daily Traffic

APPENDIX D

EXISTING PLUS PROJECT INTERSECTION LEVEL OF SERVICE CALCULATION WORKSHEETS

AM Existing Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

****

Intersection #1 Edwards Street at McFadden Avenue

****

Cycle (sec):	100	Critical Vol./Cap.(X):	0.507
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	24	Level Of Service:	A

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	2	0 1
Volume Module:												
Base Vol:	126	497	56	186	604	92	83	493	125	58	464	84
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	126	497	56	186	604	92	83	493	125	58	464	84
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	126	497	56	186	604	92	83	493	125	58	464	84
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	126	497	56	186	604	92	83	493	125	58	464	84
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	126	497	56	186	604	92	83	493	125	58	464	84
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	126	497	56	186	604	92	83	493	125	58	464	84
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.80	0.20	1.00	1.74	0.26	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	3056	344	1700	2951	449	1700	3400	1700	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.07	0.16	0.16	0.11	0.20	0.20	0.05	0.15	0.07	0.03	0.14	0.05
Crit Moves:		****		****			****				****	

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AM Existing Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

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Intersection #2 Edwards Street at Edinger Avenue

****

Cycle (sec): 100 Critical Vol./Cap.(X): 0.570
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 27 Level Of Service: A

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	3 0	1	1 0	3 0	1
Volume Module:												
Base Vol:	161	531	161	166	569	94	67	985	104	64	567	93
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	161	531	161	166	569	94	67	985	104	64	567	93
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	161	531	161	166	569	94	67	985	104	64	567	93
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	161	531	161	166	569	94	67	985	104	64	567	93
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	161	531	161	166	569	94	67	985	104	64	567	93
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	161	531	161	166	569	94	67	985	104	64	567	93
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.72	0.28	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1700	3400	1700	1700	2918	482	1700	5100	1700	1700	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.09	0.16	0.09	0.10	0.19	0.20	0.04	0.19	0.06	0.04	0.11	0.05
Crit Moves:	****					****		****		****		

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AM Existing Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

****

Intersection #3 Goldenwest Street at I-405 SB Ramps

****

Cycle (sec):	100	Critical Vol./Cap.(X):	0.421
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	21	Level Of Service:	A

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	0	0 0	2 0	1	1 0	1! 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	0	1241	0	0	803	295	316	0	371	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1241	0	0	803	295	316	0	371	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1241	0	0	803	295	316	0	371	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1241	0	0	803	0	316	0	371	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1241	0	0	803	0	316	0	371	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1241	0	0	803	0	316	0	371	0	0	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	0.00	0.00	2.00	1.00	1.38	0.00	1.62	0.00	0.00	0.00
Final Sat.:	0	5100	0	0	3400	1700	2346	0	2754	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.24	0.00	0.00	0.24	0.00	0.13	0.00	0.13	0.00	0.00	0.00
Crit Moves:	****				****				****			

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AM Existing Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Goldenwest Street at Bolsa Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.539
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	25	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2	1 0	1 0	2	1 0	2 0	3	0 1	2 0	3	0 1
Volume Module:												
Base Vol:	52	865	127	157	1044	71	85	314	84	317	902	292
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	52	865	127	157	1044	71	85	314	84	317	902	292
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	52	865	127	157	1044	71	85	314	84	317	902	292
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	52	865	127	157	1044	71	85	314	84	317	902	292
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	52	865	127	157	1044	71	85	314	84	317	902	292
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	52	865	127	157	1044	71	85	314	84	317	902	292
OvlAdjVol:									58			
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.62	0.38	1.00	2.81	0.19	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	4447	653	1700	4775	325	3400	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.02	0.19	0.19	0.09	0.22	0.22	0.03	0.06	0.05	0.09	0.18	0.17
OvlAdjV/S:									0.03			
Crit Moves:		****			****			****			****	

AM Existing Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Goldenwest Street at McFadden Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.599
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	155	810	45	187	1124	84	112	463	109	144	363	117
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	155	810	45	187	1124	84	112	463	109	144	363	117
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	155	810	45	187	1124	84	112	463	109	144	363	117
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	155	810	45	187	1124	84	112	463	109	144	363	117
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	155	810	45	187	1124	84	112	463	109	144	363	117
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	155	810	45	187	1124	84	112	463	109	144	363	117
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.79	0.21	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	5100	1700	1700	4745	355	1700	3400	1700	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.09	0.16	0.03	0.11	0.24	0.24	0.07	0.14	0.06	0.08	0.11	0.07
Crit Moves:	****				****			****			****	

AM Existing Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

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Intersection #6 Goldenwest Street at Driveway No. 12

****

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[11.0]

****

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	2	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	1
Volume Module:																				
Base Vol:	0	1094		17		0	1385		0		0		0			0		0		26
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00			1.00		1.00		1.00
Initial Bse:	0	1094		17		0	1385		0		0		0			0		0		26
Added Vol:	0	0		0		0	0		0		0		0			0		0		0
PasserByVol:	0	0		0		0	0		0		0		0			0		0		0
Initial Fut:	0	1094		17		0	1385		0		0		0			0		0		26
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00			1.00		1.00		1.00
PHF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00			1.00		1.00		1.00
PHF Volume:	0	1094		17		0	1385		0		0		0			0		0		26
Reduct Vol:	0	0		0		0	0		0		0		0			0		0		0
FinalVolume:	0	1094		17		0	1385		0		0		0			0		0		26
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx		6.9
FollowUpTim:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx		3.3
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx		373
Potent Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx		630
Move Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx		630
Volume/Cap:	xxxx	xxxx		xxxx		xxxx	xxxx		xxxx		xxxx		xxxx		xxxx	xxxx		xxxx		0.04
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx		0.1
Control Del:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx		11.0
LOS by Move:	*	*		*		*	*		*		*		*		*	*		*		B
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx		xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx		xxxxx
Shrd ConDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx		xxxxx
Shared LOS:	*	*		*		*	*		*		*		*		*	*		*		*
ApproachDel:	xxxxxx					xxxxxx					xxxxxx					11.0				
ApproachLOS:	*					*					*					B				

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Note: Queue reported is the number of cars per lane.

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AM Existing Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Goldenwest Street at Driveway No. 11

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: E[41.4]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 2	1	0	1 0 2	1	0	0 0 1!	0	0	0 0 1!	0	0
Volume Module:												
Base Vol:	7 1101		10	94 1288		3	4	0	18	4	0	6
Growth Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	7 1101		10	94 1288		3	4	0	18	4	0	6
Added Vol:	0 0		0	0 0		0	0	0	0	0	0	0
PasserByVol:	0 0		0	0 0		0	0	0	0	0	0	0
Initial Fut:	7 1101		10	94 1288		3	4	0	18	4	0	6
User Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	7 1101		10	94 1288		3	4	0	18	4	0	6
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	7 1101		10	94 1288		3	4	0	18	4	0	6
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			4.1 xxxx xxxxx			7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2 xxxx xxxxx			2.2 xxxx xxxxx			3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	1291 xxxx xxxxx			1111 xxxx xxxxx			1859	2603	431	1737	2599	372
Potent Cap.:	544 xxxx xxxxx			636 xxxx xxxxx			46	25	578	57	25	631
Move Cap.:	544 xxxx xxxxx			636 xxxx xxxxx			40	21	578	49	21	631
Volume/Cap:	0.01 xxxx xxxx			0.15 xxxx xxxx			0.10	0.00	0.03	0.08	0.00	0.01
Level Of Service Module:												
2Way95thQ:	0.0 xxxx xxxxx			0.5 xxxx xxxxx			xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	11.7 xxxx xxxxx			11.6 xxxx xxxxx			xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*	*	B	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx	169	xxxxx	xxxx	109	xxxxx
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	0.4	xxxxx	xxxxx	0.3	xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	29.5	xxxxx	xxxxx	41.4	xxxxx
Shared LOS:	*	*	*	*	*	*	*	D	*	*	E	*
ApproachDel:	xxxxxx			xxxxxx			29.5			41.4		
ApproachLOS:	*			*			D			E		

Note: Queue reported is the number of cars per lane.

AM Existing Plus Project
2.13.3396.2 Goldenwest College
Mitigation

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Goldenwest Street at Driveway No. 11

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: C[17.9]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	1	0	2	1	0	1	0	2	1	0	0	0	1!	0	0	0	0	0	0	1
Volume Module:																				
Base Vol:	7	1101			10	94	1288			3	4		0		18	0		0		6
Growth Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	7	1101			10	94	1288			3	4		0		18	0		0		6
Added Vol:	0	0			0	0	0			0	0		0		0	0		0		0
PasserByVol:	0	0			0	0	0			0	0		0		0	0		0		0
Initial Fut:	7	1101			10	94	1288			3	4		0		18	0		0		6
User Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00		1.00		1.00
PHF Volume:	7	1101			10	94	1288			3	4		0		18	0		0		6
Reduct Vol:	0	0			0	0	0			0	0		0		0	0		0		0
FinalVolume:	7	1101			10	94	1288			3	4		0		18	0		0		6
Critical Gap Module:																				
Critical Gp:	4.1	xxxx	xxxxx			4.1	xxxx	xxxxx			7.5	6.5		6.9		xxxxx	xxxx			6.9
FollowUpTim:	2.2	xxxx	xxxxx			2.2	xxxx	xxxxx			3.5	4.0		3.3		xxxxx	xxxx			3.3
Capacity Module:																				
Cnflict Vol:	1291	xxxx	xxxxx			1111	xxxx	xxxxx			1859	2603		431		xxxx	xxxx			372
Potent Cap.:	544	xxxx	xxxxx			636	xxxx	xxxxx			46	25		578		xxxx	xxxx			631
Move Cap.:	544	xxxx	xxxxx			636	xxxx	xxxxx			40	21		578		xxxx	xxxx			631
Total Cap:	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			95	89		xxxxx		146	100			xxxxx
Volume/Cap:	0.01	xxxx	xxxx			0.15	xxxx	xxxx			0.04	0.00		0.03		xxxx	xxxx			0.01
Level Of Service Module:																				
2Way95thQ:	0.0	xxxx	xxxxx			0.5	xxxx	xxxxx			xxxx	xxxx		xxxxx		xxxx	xxxx			0.0
Control Del:	11.7	xxxx	xxxxx			11.6	xxxx	xxxxx			xxxxx	xxxx		xxxxx		xxxxx	xxxx			10.8
LOS by Move:	B	*		*		B	*		*		*	*		*		*	*			B
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	301		xxxxx		xxxx	xxxx			xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	0.2		xxxxx		xxxxx	xxxx			xxxxx
Shrd ConDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	17.9		xxxxx		xxxxx	xxxx			xxxxx
Shared LOS:	*	*		*		*	*		*		*	C		*		*	*			*
ApproachDel:	xxxxxx					xxxxxx					17.9					10.8				
ApproachLOS:	*					*					C					B				

Note: Queue reported is the number of cars per lane.

AM Existing Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Goldenwest Street at Driveway No. 10

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: B[10.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 2	1	0	0 0 3	0	0	0 0 0	0	0	0 0 0	0	1
Volume Module:												
Base Vol:	0	1103	18	0	1283	0	0	0	0	0	0	5
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1103	18	0	1283	0	0	0	0	0	0	5
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1103	18	0	1283	0	0	0	0	0	0	5
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1103	18	0	1283	0	0	0	0	0	0	5
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	1103	18	0	1283	0	0	0	0	0	0	5
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	377
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	627
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	627
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	0.0
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	10.8
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	B
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			10.8		
ApproachLOS:	*			*			*			B		

Note: Queue reported is the number of cars per lane.

AM Existing Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Goldenwest Street at Driveway No. 9 (Golden West College)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.319
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	18	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2 1	0	2 0	3 0	0	0 0	0 0	0	1 0	0 0	1
Volume Module:												
Base Vol:	0	1084	40	91	1193	0	0	0	0	27	0	37
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1084	40	91	1193	0	0	0	0	27	0	37
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1084	40	91	1193	0	0	0	0	27	0	37
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1084	40	91	1193	0	0	0	0	27	0	37
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1084	40	91	1193	0	0	0	0	27	0	37
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1084	40	91	1193	0	0	0	0	27	0	37
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.89	0.11	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4919	181	3400	5100	0	0	0	0	1700	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.22	0.22	0.03	0.23	0.00	0.00	0.00	0.00	0.02	0.00	0.02
Crit Moves:		****		****								****

AM Existing Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #10 Goldenwest Street at Driveway No. 8

****

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: B[10.9]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 2	1	0	0 0 3	0	0	0 0 0	0	0	0 0 0	0	1
Volume Module:												
Base Vol:	0	1102	40	0	1195	0	0	0	0	0	0	5
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1102	40	0	1195	0	0	0	0	0	0	5
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1102	40	0	1195	0	0	0	0	0	0	5
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1102	40	0	1195	0	0	0	0	0	0	5
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	1102	40	0	1195	0	0	0	0	0	0	5
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	387
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	617
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	617
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	0.0
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	10.9
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	B
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			10.9		
ApproachLOS:	*			*			*			B		

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Note: Queue reported is the number of cars per lane.

****

AM Existing Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #11 Goldenwest Street at Driveway No. 7

****

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: B[11.1]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 2	1	0	0 0 3	0	0	0 0 0	0	0	0 0 0	0	1
Volume Module:												
Base Vol:	0	1132	47	0	1195	0	0	0	0	0	0	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1132	47	0	1195	0	0	0	0	0	0	10
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1132	47	0	1195	0	0	0	0	0	0	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1132	47	0	1195	0	0	0	0	0	0	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	1132	47	0	1195	0	0	0	0	0	0	10
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	401
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	605
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	605
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.02
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	0.1
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	11.1
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	B
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			11.1		
ApproachLOS:	*			*			*			B		

****

Note: Queue reported is the number of cars per lane.

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AM Existing Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

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Intersection #12 Goldenwest Street at Edinger Avenue

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Cycle (sec):	100	Critical Vol./Cap.(X):	0.577
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	2	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	89	933	112	129	978	87	114	946	104	69	445	132
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	89	933	112	129	978	87	114	946	104	69	445	132
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	89	933	112	129	978	87	114	946	104	69	445	132
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	89	933	112	129	978	87	114	946	104	69	445	132
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	89	933	112	129	978	87	114	946	104	69	445	132
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	89	933	112	129	978	87	114	946	104	69	445	132
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.68	0.32	1.00	2.75	0.25	1.00	2.70	0.30	1.00	2.31	0.69
Final Sat.:	1700	4553	547	1700	4683	417	1700	4595	505	1700	3933	1167
Capacity Analysis Module:												
Vol/Sat:	0.05	0.20	0.20	0.08	0.21	0.21	0.07	0.21	0.21	0.04	0.11	0.11
Crit Moves:		****		****				****		****		

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AM Existing Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Goldenwest Street at Heil Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.500
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	24	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	1	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	77	941	76	93	1084	34	77	585	97	34	322	86
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	77	941	76	93	1084	34	77	585	97	34	322	86
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	77	941	76	93	1084	34	77	585	97	34	322	86
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	77	941	76	93	1084	34	77	585	97	34	322	86
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	77	941	76	93	1084	34	77	585	97	34	322	86
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	77	941	76	93	1084	34	77	585	97	34	322	86
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	5100	1700	1700	5100	1700	1700	3400	1700	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.05	0.18	0.04	0.05	0.21	0.02	0.05	0.17	0.06	0.02	0.09	0.05
Crit Moves:	****				****			****		****		

AM Existing Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Driveway No. 6 (Golden West College) at Edinger Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.317
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxx
Optimal Cycle:	18	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	0 1	1 0	0	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	6	0	3	18	1	11	41	1255	15	12	697	72
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	0	3	18	1	11	41	1255	15	12	697	72
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	6	0	3	18	1	11	41	1255	15	12	697	72
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	6	0	3	18	1	11	41	1255	15	12	697	72
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	0	3	18	1	11	41	1255	15	12	697	72
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	6	0	3	18	1	11	41	1255	15	12	697	72
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	1.00	0.08	0.92	1.00	2.96	0.04	1.00	2.72	0.28
Final Sat.:	1700	0	1700	1700	142	1558	1700	5040	60	1700	4622	478
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.25	0.25	0.01	0.15	0.15
Crit Moves:		****		****				****		****		

AM Existing Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #15 Driveway No. 5 at Edinger Avenue

****

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: B[10.2]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0	0 0		0 0 0	0 1		0 0 3	0 0		0 0 2	1 0	
Volume Module:												
Base Vol:	0	0	0	0	0	5	0	1185	0	0	799	67
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	5	0	1185	0	0	799	67
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	0	5	0	1185	0	0	799	67
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	5	0	1185	0	0	799	67
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	5	0	1185	0	0	799	67
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	300	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	702	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	702	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	0.0	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	10.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	B	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			10.2			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

****

Note: Queue reported is the number of cars per lane.

****

AM Existing Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #16 Driveway No. 4 at Edinger Avenue

****

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: E[39.9]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0	0	1	0 0	1! 0	0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	0	0	5	8	0	1	40	1141	5	5	859	78
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	5	8	0	1	40	1141	5	5	859	78
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	5	8	0	1	40	1141	5	5	859	78
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	5	8	0	1	40	1141	5	5	859	78
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	5	8	0	1	40	1141	5	5	859	78
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	383	1368	2134	325	937	xxxx	xxxxx	1146	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	621	108	50	676	739	xxxx	xxxxx	617	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	621	102	47	676	739	xxxx	xxxxx	617	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.01	0.08	0.00	0.00	0.05	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	0.0	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	10.8	xxxxx	xxxx	xxxxx	10.1	xxxx	xxxxx	10.9	xxxx	xxxxx
LOS by Move:	*	*	B	*	*	*	B	*	*	B	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	112	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	39.9	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	E	*	*	*	*	*	*	*
ApproachDel:		10.8			39.9			xxxxxx			xxxxxx	
ApproachLOS:		B			E			*			*	

****

Note: Queue reported is the number of cars per lane.

****

AM Existing Plus Project
2.13.3396.2 Goldenwest College
Mitigation

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #16 Driveway No. 4 at Edinger Avenue

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B[10.9]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 1			0 0 0 0 1			1 0 2 1 0			1 0 2 1 0		
Volume Module:												
Base Vol:	0	0	5	0	0	9	40	1141	5	5	859	78
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	5	0	0	9	40	1141	5	5	859	78
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	5	0	0	9	40	1141	5	5	859	78
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	5	0	0	9	40	1141	5	5	859	78
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	5	0	0	9	40	1141	5	5	859	78
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.9	xxxxx	xxxx	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	383	xxxx	xxxx	325	937	xxxx	xxxxx	1146	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	621	xxxx	xxxx	676	739	xxxx	xxxxx	617	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	621	xxxx	xxxx	676	739	xxxx	xxxxx	617	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.01	xxxx	xxxx	0.01	0.05	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	0.0	xxxx	xxxx	0.0	0.2	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	10.8	xxxxx	xxxx	10.4	10.1	xxxx	xxxxx	10.9	xxxx	xxxxx
LOS by Move:	*	*	B	*	*	B	B	*	*	B	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:		10.8			10.4			xxxxxx			xxxxxx	
ApproachLOS:		B			B			*			*	

Note: Queue reported is the number of cars per lane.

AM Existing Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

****

Intersection #17 Vermont Street/Gothard Street at McFadden Avenue

****

Cycle (sec):	100	Critical Vol./Cap.(X):	0.541
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	26	Level Of Service:	A

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	0	0 1	0	0	1! 0 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	131	0	147	56	0	4	6	407	280	285	509	26
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	131	0	147	56	0	4	6	407	280	285	509	26
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	131	0	147	56	0	4	6	407	280	285	509	26
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	131	0	147	56	0	4	6	407	280	285	509	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	131	0	147	56	0	4	6	407	280	285	509	26
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	131	0	147	56	0	4	6	407	280	285	509	26
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.93	0.00	0.07	1.00	1.18	0.82	1.00	1.90	0.10
Final Sat.:	3400	0	1700	1587	0	113	1700	2014	1386	1700	3235	165
Capacity Analysis Module:												
Vol/Sat:	0.04	0.00	0.09	0.04	0.00	0.04	0.00	0.20	0.20	0.17	0.16	0.16
Crit Moves:			****			****		****		****		

****

AM Existing Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #18 Gothard Street at Driveway No. 1

****

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: B[11.5]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 2	0	0	0 0 1	1	0	1 0 0	0	1	0 0 0	0	0
Volume Module:												
Base Vol:	31	327	0	0	434	177	29	0	31	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	31	327	0	0	434	177	29	0	31	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	31	327	0	0	434	177	29	0	31	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	31	327	0	0	434	177	29	0	31	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	31	327	0	0	434	177	29	0	31	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	xxxx	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	611	xxxx	xxxxx	xxxx	xxxx	xxxxx	748	xxxx	306	xxxx	xxxx	xxxxx
Potent Cap.:	978	xxxx	xxxxx	xxxx	xxxx	xxxxx	352	xxxx	696	xxxx	xxxx	xxxxx
Move Cap.:	978	xxxx	xxxxx	xxxx	xxxx	xxxxx	344	xxxx	696	xxxx	xxxx	xxxxx
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	505	439	xxxxx	515	394	xxxxx
Volume/Cap:	0.03	xxxx	xxxx	xxxx	xxxx	xxxx	0.06	xxxx	0.04	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.2	xxxx	0.1	xxxx	xxxx	xxxxx
Control Del:	8.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	12.6	xxxx	10.4	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	B	*	B	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			11.5			xxxxxx		
ApproachLOS:	*			*			B			*		

****

Note: Queue reported is the number of cars per lane.

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AM Existing Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #19 Gothard Street at Driveway No. 2/Center Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.317
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	18	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 1	1 0	1	0 1	1 0	1	0 0	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	61	265	121	126	300	53	18	16	14	105	84	91
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	61	265	121	126	300	53	18	16	14	105	84	91
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	61	265	121	126	300	53	18	16	14	105	84	91
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	61	265	121	126	300	53	18	16	14	105	84	91
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	61	265	121	126	300	53	18	16	14	105	84	91
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	61	265	121	126	300	53	18	16	14	105	84	91
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.37	0.63	1.00	1.70	0.30	1.00	0.53	0.47	1.00	1.00	1.00
Final Sat.:	1700	2334	1066	1700	2890	510	1700	907	793	1700	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.11	0.11	0.07	0.10	0.10	0.01	0.02	0.02	0.06	0.05	0.05
Crit Moves:		****		****				****		****		

AM Existing Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #20 Gothard Street at Driveway No. 3

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: B[11.4]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 2	0	0	0 0	1	1 0	0 0	1! 0	0	0 0	0	0 0
Volume Module:												
Base Vol:	21	449	0	0	412	11	5	0	9	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	21	449	0	0	412	11	5	0	9	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	21	449	0	0	412	11	5	0	9	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	21	449	0	0	412	11	5	0	9	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	21	449	0	0	412	11	5	0	9	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	423	xxxx	xxxxx	xxxx	xxxx	xxxxx	684	909	212	xxxx	xxxx	xxxxx
Potent Cap.:	1147	xxxx	xxxxx	xxxx	xxxx	xxxxx	387	277	800	xxxx	xxxx	xxxxx
Move Cap.:	1147	xxxx	xxxxx	xxxx	xxxx	xxxxx	381	272	800	xxxx	xxxx	xxxxx
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	0.00	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	575	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	11.4	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			11.4			xxxxxx		
ApproachLOS:	*			*			B			*		

Note: Queue reported is the number of cars per lane.

AM Existing Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #21 Gothard Street at Edinger Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.510
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	24	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	84	341	114	86	264	92	50	994	112	151	503	74
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	84	341	114	86	264	92	50	994	112	151	503	74
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	84	341	114	86	264	92	50	994	112	151	503	74
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	84	341	114	86	264	92	50	994	112	151	503	74
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	84	341	114	86	264	92	50	994	112	151	503	74
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	84	341	114	86	264	92	50	994	112	151	503	74
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.48	0.52	1.00	2.70	0.30	1.00	2.62	0.38
Final Sat.:	1700	3400	1700	1700	2521	879	1700	4584	516	1700	4446	654
Capacity Analysis Module:												
Vol/Sat:	0.05	0.10	0.07	0.05	0.10	0.10	0.03	0.22	0.22	0.09	0.11	0.11
Crit Moves:	****				****			****		****		

AM Existing Plus Project
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #22 Gothard Street at Heil Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.450
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	22	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	95	441	96	34	369	22	76	568	179	117	338	57
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	95	441	96	34	369	22	76	568	179	117	338	57
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	95	441	96	34	369	22	76	568	179	117	338	57
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	95	441	96	34	369	22	76	568	179	117	338	57
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	95	441	96	34	369	22	76	568	179	117	338	57
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	95	441	96	34	369	22	76	568	179	117	338	57
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	3400	1700	1700	3400	1700	1700	3400	1700	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.06	0.13	0.06	0.02	0.11	0.01	0.04	0.17	0.11	0.07	0.10	0.03
Crit Moves:	****				****			****		****		

AM Existing Plus Project
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #23 I-405 SB Ramps at Center Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.507
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	24	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Permitted		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 0	2 0	0	0 1	1 0	2	0 0	0 0	2	0 1
Volume Module:												
Base Vol:	0	0	0	447	0	77	91	185	0	0	419	462
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	447	0	77	91	185	0	0	419	462
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	447	0	77	91	185	0	0	419	462
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	447	0	77	91	185	0	0	419	462
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	447	0	77	91	185	0	0	419	462
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	447	0	77	91	185	0	0	419	462
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	3400	0	1700	1700	3400	0	0	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.00	0.05	0.05	0.05	0.00	0.00	0.12	0.27
Crit Moves:				****			****					****

AM Existing Plus Project
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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

****

Intersection #24 Beach Boulevard at McFadden Avenue

****

Cycle (sec):	100	Critical Vol./Cap.(X):	0.740
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	C

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	2 0	3 1	0	2 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	129	1864	144	190	2377	354	270	359	118	373	478	115
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	129	1864	144	190	2377	354	270	359	118	373	478	115
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	129	1864	144	190	2377	354	270	359	118	373	478	115
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	129	1864	144	190	2377	354	270	359	118	373	478	115
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	129	1864	144	190	2377	354	270	359	118	373	478	115
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	129	1864	144	190	2377	354	270	359	118	373	478	115
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.71	0.29	2.00	3.48	0.52	2.00	1.51	0.49	2.00	1.61	0.39
Final Sat.:	3400	6312	488	3400	5919	881	3400	2559	841	3400	2741	659
Capacity Analysis Module:												
Vol/Sat:	0.04	0.30	0.30	0.06	0.40	0.40	0.08	0.14	0.14	0.11	0.17	0.17
Crit Moves:	****				****			****		****		

****

AM Existing Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #25 Beach Boulevard at Center Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.600
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4	0 0	0 0	4	0 1	2 0	0	0 2	0 0	0	0 0
Volume Module:												
Base Vol:	0	1978	0	0	2869	871	79	0	436	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1978	0	0	2869	871	79	0	436	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1978	0	0	2869	871	79	0	436	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1978	0	0	2869	0	79	0	436	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1978	0	0	2869	0	79	0	436	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1978	0	0	2869	0	79	0	436	0	0	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.00	0.00	0.00	4.00	1.00	2.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	0	6800	0	0	6800	1700	3400	0	3400	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.29	0.00	0.00	0.42	0.00	0.02	0.00	0.13	0.00	0.00	0.00
Crit Moves:	****				****				****			

AM Existing Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #26 Beach Boulevard at Edinger Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.675
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	4 0	2	2 0	3 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	129	1499	259	430	2284	550	193	776	114	121	503	260
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	129	1499	259	430	2284	550	193	776	114	121	503	260
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	129	1499	259	430	2284	550	193	776	114	121	503	260
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	129	1499	259	430	2284	550	193	776	114	121	503	260
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	129	1499	259	430	2284	550	193	776	114	121	503	260
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	129	1499	259	430	2284	550	193	776	114	121	503	260
OvlAdjVol:						357			50			
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	4.00	2.00	2.00	3.00	1.00	2.00	2.00	1.00
Final Sat.:	3400	5100	1700	3400	6800	3400	3400	5100	1700	3400	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.29	0.15	0.13	0.34	0.16	0.06	0.15	0.07	0.04	0.15	0.15
OvlAdjV/S:						0.11			0.03			
Crit Moves:		****			****			****			****	

PM Existing Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

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Intersection #1 Edwards Street at McFadden Avenue

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Cycle (sec):	100	Critical Vol./Cap.(X):	0.498
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	24	Level Of Service:	A

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	2	0 1
Volume Module:												
Base Vol:	61	556	61	78	564	69	108	610	139	71	553	106
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	61	556	61	78	564	69	108	610	139	71	553	106
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	61	556	61	78	564	69	108	610	139	71	553	106
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	61	556	61	78	564	69	108	610	139	71	553	106
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	61	556	61	78	564	69	108	610	139	71	553	106
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	61	556	61	78	564	69	108	610	139	71	553	106
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.80	0.20	1.00	1.78	0.22	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	3064	336	1700	3029	371	1700	3400	1700	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.18	0.18	0.05	0.19	0.19	0.06	0.18	0.08	0.04	0.16	0.06
Crit Moves:	****				****		****				****	

****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Edwards Street at Edinger Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.519
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	24	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	3 0	1	1 0	3 0	1
Volume Module:												
Base Vol:	93	492	118	96	483	106	82	732	91	105	985	150
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	93	492	118	96	483	106	82	732	91	105	985	150
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	93	492	118	96	483	106	82	732	91	105	985	150
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	93	492	118	96	483	106	82	732	91	105	985	150
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	93	492	118	96	483	106	82	732	91	105	985	150
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	93	492	118	96	483	106	82	732	91	105	985	150
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.64	0.36	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1700	3400	1700	1700	2788	612	1700	5100	1700	1700	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.05	0.14	0.07	0.06	0.17	0.17	0.05	0.14	0.05	0.06	0.19	0.09
Crit Moves:	****				****		****				****	

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Goldenwest Street at I-405 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.584
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 3	0 0	0	0 2	0 1	1	0 1!	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	0	2000	0	0	802	468	276	0	447	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2000	0	0	802	468	276	0	447	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	2000	0	0	802	468	276	0	447	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2000	0	0	802	0	276	0	447	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2000	0	0	802	0	276	0	447	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2000	0	0	802	0	276	0	447	0	0	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	0.00	0.00	2.00	1.00	1.15	0.00	1.85	0.00	0.00	0.00
Final Sat.:	0	5100	0	0	3400	1700	1947	0	3153	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.39	0.00	0.00	0.24	0.00	0.14	0.00	0.14	0.00	0.00	0.00
Crit Moves:		****		****					****			

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

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Intersection #4 Goldenwest Street at Bolsa Avenue

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Cycle (sec):	100	Critical Vol./Cap.(X):	0.796
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	C

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	1 0	2 1	0	2 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	233	1353	234	111	1027	77	221	890	143	282	663	518
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	233	1353	234	111	1027	77	221	890	143	282	663	518
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	233	1353	234	111	1027	77	221	890	143	282	663	518
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	233	1353	234	111	1027	77	221	890	143	282	663	518
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	233	1353	234	111	1027	77	221	890	143	282	663	518
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	233	1353	234	111	1027	77	221	890	143	282	663	518
OvlAdjVol:									27			
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.56	0.44	1.00	2.79	0.21	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	4348	752	1700	4744	356	3400	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.07	0.31	0.31	0.07	0.22	0.22	0.07	0.17	0.08	0.08	0.13	0.30
OvlAdjV/S:									0.02			
Crit Moves:		****			****			****				****

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Goldenwest Street at McFadden Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.729
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	206	1178	101	225	1226	76	138	528	101	169	494	377
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	206	1178	101	225	1226	76	138	528	101	169	494	377
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	206	1178	101	225	1226	76	138	528	101	169	494	377
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	206	1178	101	225	1226	76	138	528	101	169	494	377
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	206	1178	101	225	1226	76	138	528	101	169	494	377
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	206	1178	101	225	1226	76	138	528	101	169	494	377
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.82	0.18	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	5100	1700	1700	4802	298	1700	3400	1700	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.12	0.23	0.06	0.13	0.26	0.26	0.08	0.16	0.06	0.10	0.15	0.22
Crit Moves:	****				****		****					****

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

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Intersection #6 Goldenwest Street at Driveway No. 12

****

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B[13.0]

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 2	1	0	0 0 3	0	0	0 0 0	0	0	0 0 0	0	1
Volume Module:												
Base Vol:	0	1506	16	0	1579	0	0	0	0	0	0	63
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1506	16	0	1579	0	0	0	0	0	0	63
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1506	16	0	1579	0	0	0	0	0	0	63
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1506	16	0	1579	0	0	0	0	0	0	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	1506	16	0	1579	0	0	0	0	0	0	63
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	510
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	514
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	514
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.12
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	0.4
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	13.0
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	B
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			13.0		
ApproachLOS:	*			*			*			B		

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Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

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Intersection #7 Goldenwest Street at Driveway No. 11

****

Average Delay (sec/veh): 15.9 Worst Case Level Of Service: F[620.8]

****

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	1	0	2	1	0		1	0	2	1	0		0	0	1!	0	0		0	0	1!	0	0	
Volume Module:																								
Base Vol:	19	1467		28			179	1391		8			1		0		13		23		0		52	
Growth Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	19	1467		28			179	1391		8			1		0		13		23		0		52	
User Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
PHF Volume:	19	1467		28			179	1391		8			1		0		13		23		0		52	
Reduct Vol:	0	0		0			0	0		0			0		0		0		0		0		0	
FinalVolume:	19	1467		28			179	1391		8			1		0		13		23		0		52	
Critical Gap Module:																								
Critical Gp:	4.1	xxxx	xxxxx				4.1	xxxx	xxxxx				7.5		6.5		6.9		7.5		6.5		6.9	
FollowUpTim:	2.2	xxxx	xxxxx				2.2	xxxx	xxxxx				3.5		4.0		3.3		3.5		4.0		3.3	
Capacity Module:																								
Cnflict Vol:	1399	xxxx	xxxxx				1495	xxxx	xxxxx				2280		3286		468		2341		3276		503	
Potent Cap.:	495	xxxx	xxxxx				455	xxxx	xxxxx				22		9		547		20		9		519	
Move Cap.:	495	xxxx	xxxxx				455	xxxx	xxxxx				13		5		547		13		5		519	
Volume/Cap:	0.04	xxxx	xxxx				0.39	xxxx	xxxx				0.07		0.00		0.02		1.76		0.00		0.10	
Level Of Service Module:																								
2Way95thQ:	0.1	xxxx	xxxxx				1.8	xxxx	xxxxx				xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx	
Control Del:	12.6	xxxx	xxxxx				18.0	xxxx	xxxxx				xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
LOS by Move:	B	*		*			C	*		*			*		*		*		*		*		*	
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx		143		xxxxx		xxxx		40		xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx		0.3		xxxxx		xxxxx		7.9		xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx		33.0		xxxxx		xxxxx		621		xxxxx	
Shared LOS:	*	*		*			*	*		*			*		D		*		*		F		*	
ApproachDel:	xxxxxx						xxxxxx						33.0						620.8					
ApproachLOS:	*						*						D						F					

****

Note: Queue reported is the number of cars per lane.

****

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PM Existing Plus Project
2.13.3396.2 Goldenwest College
Mitigation

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

****

Intersection #7 Goldenwest Street at Driveway No. 11

****

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: C[18.0]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 2	1	0	1 0 2	1	0	0 0 1!	0	0	0 0 0	0	1
Volume Module:												
Base Vol:	19 1467		28	179 1391		8	1	0	13	0	0	52
Growth Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	19 1467		28	179 1391		8	1	0	13	0	0	52
User Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	19 1467		28	179 1391		8	1	0	13	0	0	52
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	19 1467		28	179 1391		8	1	0	13	0	0	52
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			4.1 xxxx xxxxx			7.5	6.5	6.9	xxxxx	xxxx	6.9
FollowUpTim:	2.2 xxxx xxxxx			2.2 xxxx xxxxx			3.5	4.0	3.3	xxxxx	xxxx	3.3
Capacity Module:												
Cnflict Vol:	1399 xxxx xxxxx			1495 xxxx xxxxx			2280	3286	468	xxxx	xxxx	503
Potent Cap.:	495 xxxx xxxxx			455 xxxx xxxxx			22	9	547	xxxx	xxxx	519
Move Cap.:	495 xxxx xxxxx			455 xxxx xxxxx			13	5	547	xxxx	xxxx	519
Total Cap:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			45	0	xxxxx	72	46	xxxxx
Volume/Cap:	0.04 xxxx	xxxx		0.39 xxxx	xxxx		0.02	xxxx	0.02	xxxx	xxxx	0.10
Level Of Service Module:												
2Way95thQ:	0.1 xxxx xxxxx			1.8 xxxx xxxxx			xxxx	xxxx	xxxxx	xxxx	xxxx	0.3
Control Del:	12.6 xxxx xxxxx			18.0 xxxx xxxxx			xxxxx	xxxx	xxxxx	xxxxx	xxxx	12.7
LOS by Move:	B	*	*	C	*	*	*	*	*	*	*	B
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx	303	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	17.4	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			17.4			12.7		
ApproachLOS:	*			*			C			B		

****

Note: Queue reported is the number of cars per lane.

****

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PM Existing Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #8 Goldenwest Street at Driveway No. 10

****

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: B[13.1]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 2	1	0	0 0 3	0	0	0 0 0	0	0	0 0 0	0	1
Volume Module:												
Base Vol:	0 1462		12	0 1335		0	0 0		0	0 0		85
Growth Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
Initial Bse:	0 1462		12	0 1335		0	0 0		0	0 0		85
Added Vol:	0 0		0	0 0		0	0 0		0	0 0		0
PasserByVol:	0 0		0	0 0		0	0 0		0	0 0		0
Initial Fut:	0 1462		12	0 1335		0	0 0		0	0 0		85
User Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
PHF Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
PHF Volume:	0 1462		12	0 1335		0	0 0		0	0 0		85
Reduct Vol:	0 0		0	0 0		0	0 0		0	0 0		0
FinalVolume:	0 1462		12	0 1335		0	0 0		0	0 0		85
Critical Gap Module:												
Critical Gp:	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		6.9
FollowUpTim:	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		3.3
Capacity Module:												
Cnflict Vol:	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		493
Potent Cap.:	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		527
Move Cap.:	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		527
Volume/Cap:	xxxx xxxx		xxxx	xxxx xxxx		xxxx	xxxx xxxx		xxxx	xxxx xxxx		0.16
Level Of Service Module:												
2Way95thQ:	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		0.6
Control Del:	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		13.1
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	B
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx
SharedQueue:	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx
Shrd ConDel:	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			13.1		
ApproachLOS:	*			*			*			B		

****

Note: Queue reported is the number of cars per lane.

****

PM Existing Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Goldenwest Street at Driveway No. 9 (Golden West College)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.403
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	20	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	1 0	2 0	3	0 0	0 0	0	0 0	1 0	0	0 1
Volume Module:												
Base Vol:	0	1400	46	91	1244	0	0	0	0	67	0	73
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1400	46	91	1244	0	0	0	0	67	0	73
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1400	46	91	1244	0	0	0	0	67	0	73
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1400	46	91	1244	0	0	0	0	67	0	73
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1400	46	91	1244	0	0	0	0	67	0	73
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1400	46	91	1244	0	0	0	0	67	0	73
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.90	0.10	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4938	162	3400	5100	0	0	0	0	1700	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.28	0.28	0.03	0.24	0.00	0.00	0.00	0.00	0.04	0.00	0.04
Crit Moves:		****		****								****

PM Existing Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #10 Goldenwest Street at Driveway No. 8

****

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[12.2]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 2	1	0	0 0 3	0	0	0 0 0	0	0	0 0 0	0	1
Volume Module:												
Base Vol:	0 1440		30	0 1398		0	0 0		0	0 0		24
Growth Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
Initial Bse:	0 1440		30	0 1398		0	0 0		0	0 0		24
Added Vol:	0 0		0	0 0		0	0 0		0	0 0		0
PasserByVol:	0 0		0	0 0		0	0 0		0	0 0		0
Initial Fut:	0 1440		30	0 1398		0	0 0		0	0 0		24
User Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
PHF Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
PHF Volume:	0 1440		30	0 1398		0	0 0		0	0 0		24
Reduct Vol:	0 0		0	0 0		0	0 0		0	0 0		0
FinalVolume:	0 1440		30	0 1398		0	0 0		0	0 0		24
Critical Gap Module:												
Critical Gp:	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		6.9
FollowUpTim:	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		3.3
Capacity Module:												
Cnflict Vol:	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		495
Potent Cap.:	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		525
Move Cap.:	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		525
Volume/Cap:	xxxx xxxx		xxxx	xxxx xxxx		xxxx	xxxx xxxx		xxxx	xxxx xxxx		0.05
Level Of Service Module:												
2Way95thQ:	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		0.1
Control Del:	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		12.2
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	B
Movement:	LT - LTR		- RT	LT - LTR		- RT	LT - LTR		- RT	LT - LTR		- RT
Shared Cap.:	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx
SharedQueue:	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx
Shrd ConDel:	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			12.2		
ApproachLOS:	*			*			*			B		

****

Note: Queue reported is the number of cars per lane.

****

PM Existing Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #11 Goldenwest Street at Driveway No. 7

****

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[12.2]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 2	1	0	0 0 3	0	0	0 0 0	0	0	0 0 0	0	1
Volume Module:												
Base Vol:	0 1438		19	0 1398		0	0 0		0	0 0		32
Growth Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
Initial Bse:	0 1438		19	0 1398		0	0 0		0	0 0		32
Added Vol:	0 0		0	0 0		0	0 0		0	0 0		0
PasserByVol:	0 0		0	0 0		0	0 0		0	0 0		0
Initial Fut:	0 1438		19	0 1398		0	0 0		0	0 0		32
User Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
PHF Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
PHF Volume:	0 1438		19	0 1398		0	0 0		0	0 0		32
Reduct Vol:	0 0		0	0 0		0	0 0		0	0 0		0
FinalVolume:	0 1438		19	0 1398		0	0 0		0	0 0		32
Critical Gap Module:												
Critical Gp:	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		6.9
FollowUpTim:	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		3.3
Capacity Module:												
Cnflict Vol:	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		489
Potent Cap.:	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		530
Move Cap.:	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		530
Volume/Cap:	xxxx xxxx		xxxx	xxxx xxxx		xxxx	xxxx xxxx		xxxx	xxxx xxxx		0.06
Level Of Service Module:												
2Way95thQ:	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		0.2
Control Del:	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		12.2
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	B
Movement:	LT - LTR		- RT	LT - LTR		- RT	LT - LTR		- RT	LT - LTR		- RT
Shared Cap.:	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx
SharedQueue:	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx
Shrd ConDel:	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			12.2		
ApproachLOS:	*			*			*			B		

****

Note: Queue reported is the number of cars per lane.

****

PM Existing Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Goldenwest Street at Edinger Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.687
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	2	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	132	1202	79	149	1126	124	105	837	101	86	1057	150
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	132	1202	79	149	1126	124	105	837	101	86	1057	150
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	132	1202	79	149	1126	124	105	837	101	86	1057	150
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	132	1202	79	149	1126	124	105	837	101	86	1057	150
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	132	1202	79	149	1126	124	105	837	101	86	1057	150
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	132	1202	79	149	1126	124	105	837	101	86	1057	150
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.81	0.19	1.00	2.70	0.30	1.00	2.68	0.32	1.00	2.63	0.37
Final Sat.:	1700	4785	315	1700	4594	506	1700	4551	549	1700	4466	634
Capacity Analysis Module:												
Vol/Sat:	0.08	0.25	0.25	0.09	0.25	0.25	0.06	0.18	0.18	0.05	0.24	0.24
Crit Moves:		****		****			****				****	

PM Existing Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

****

Intersection #13 Goldenwest Street at Heil Avenue

****

Cycle (sec):	100	Critical Vol./Cap.(X):	0.541
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	26	Level Of Service:	A

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	1	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	118	1162	118	86	1119	71	80	467	89	110	511	134
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	118	1162	118	86	1119	71	80	467	89	110	511	134
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	118	1162	118	86	1119	71	80	467	89	110	511	134
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	118	1162	118	86	1119	71	80	467	89	110	511	134
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	118	1162	118	86	1119	71	80	467	89	110	511	134
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	118	1162	118	86	1119	71	80	467	89	110	511	134
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	5100	1700	1700	5100	1700	1700	3400	1700	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.07	0.23	0.07	0.05	0.22	0.04	0.05	0.14	0.05	0.06	0.15	0.08
Crit Moves:	****				****			****			****	

****

PM Existing Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Driveway No. 6 (Golden West College) at Edinger Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.374
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	19	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0 1	0	1	0 0	1 0	1	0 2	1 0	1	0 2	1 0
Volume Module:												
Base Vol:	83	1	29	47	3	16	25	978	55	69	1195	74
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	83	1	29	47	3	16	25	978	55	69	1195	74
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	83	1	29	47	3	16	25	978	55	69	1195	74
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	83	1	29	47	3	16	25	978	55	69	1195	74
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	83	1	29	47	3	16	25	978	55	69	1195	74
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	83	1	29	47	3	16	25	978	55	69	1195	74
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.49	0.51	1.00	0.16	0.84	1.00	2.84	0.16	1.00	2.83	0.17
Final Sat.:	1700	827	873	1700	268	1432	1700	4828	272	1700	4803	297
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.03	0.03	0.01	0.01	0.01	0.20	0.20	0.04	0.25	0.25
Crit Moves:	****				****		****				****	

PM Existing Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

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Intersection #15 Driveway No. 5 at Edinger Avenue

****

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[11.8]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0	0 0	0	0 0 0	0 1		0 0 3	0 0		0 0 2	1 0	
Volume Module:												
Base Vol:	0	0	0	0	0	28	0	1111	0	0	1332	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	28	0	1111	0	0	1332	20
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	0	28	0	1111	0	0	1332	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	28	0	1111	0	0	1332	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	28	0	1111	0	0	1332	20
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	454	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	559	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	559	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	0.05	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	0.2	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	11.8	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	B	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			11.8			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

****

Note: Queue reported is the number of cars per lane.

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PM Existing Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

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Intersection #16 Driveway No. 4 at Edinger Avenue

****

Average Delay (sec/veh): 2.5 Worst Case Level Of Service: F[143.9]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0	0 1		0 0	1! 0 0		1 0	2 1 0		1 0	2 1 0	
Volume Module:												
Base Vol:	0	0	5	36	0	7	10	1096	5	5	1340	52
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	5	36	0	7	10	1096	5	5	1340	52
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	5	36	0	7	10	1096	5	5	1340	52
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	5	36	0	7	10	1096	5	5	1340	52
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	5	36	0	7	10	1096	5	5	1340	52
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	368	1761	2497	473	1392	xxxx	xxxxx	1101	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	635	55	29	543	498	xxxx	xxxxx	642	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	635	53	29	543	498	xxxx	xxxxx	642	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.01	0.68	0.00	0.01	0.02	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	0.0	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	10.7	xxxxx	xxxx	xxxxx	12.4	xxxx	xxxxx	10.7	xxxx	xxxxx
LOS by Move:	*	*	B	*	*	*	B	*	*	B	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	62	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	3.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	144	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	F	*	*	*	*	*	*	*
ApproachDel:		10.7			143.9			xxxxxx			xxxxxx	
ApproachLOS:		B			F			*			*	

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Note: Queue reported is the number of cars per lane.

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PM Existing Plus Project
2.13.3396.2 Goldenwest College
Mitigation

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #16 Driveway No. 4 at Edinger Avenue

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B[12.4]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 1			0 0 0 0 1			1 0 2 1 0			1 0 2 1 0		
Volume Module:												
Base Vol:	0	0	5	0	0	43	10	1096	5	5	1340	52
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	5	0	0	43	10	1096	5	5	1340	52
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	5	0	0	43	10	1096	5	5	1340	52
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	5	0	0	43	10	1096	5	5	1340	52
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	5	0	0	43	10	1096	5	5	1340	52
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.9	xxxxx	xxxx	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	368	xxxx	xxxx	473	1392	xxxx	xxxxx	1101	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	635	xxxx	xxxx	543	498	xxxx	xxxxx	642	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	635	xxxx	xxxx	543	498	xxxx	xxxxx	642	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.01	xxxx	xxxx	0.08	0.02	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	0.0	xxxx	xxxx	0.3	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	10.7	xxxxx	xxxx	12.2	12.4	xxxx	xxxxx	10.7	xxxx	xxxxx
LOS by Move:	*	*	B	*	*	B	B	*	*	B	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:		10.7			12.2			xxxxxx			xxxxxx	
ApproachLOS:		B			B			*			*	

Note: Queue reported is the number of cars per lane.

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2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

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Intersection #17 Vermont Street/Gothard Street at McFadden Avenue

****

Cycle (sec):	100	Critical Vol./Cap.(X):	0.726
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	C

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	0	0 1	0	0	1! 0	0	1 0	1 1	0	1 0	1 1 0
Volume Module:												
Base Vol:	490	0	426	42	0	2	2	541	385	217	600	56
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	490	0	426	42	0	2	2	541	385	217	600	56
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	490	0	426	42	0	2	2	541	385	217	600	56
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	490	0	426	42	0	2	2	541	385	217	600	56
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	490	0	426	42	0	2	2	541	385	217	600	56
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	490	0	426	42	0	2	2	541	385	217	600	56
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.95	0.00	0.05	1.00	1.17	0.83	1.00	1.83	0.17
Final Sat.:	3400	0	1700	1623	0	77	1700	1986	1414	1700	3110	290
Capacity Analysis Module:												
Vol/Sat:	0.14	0.00	0.25	0.03	0.00	0.03	0.00	0.27	0.27	0.13	0.19	0.19
Crit Moves:			****	****				****		****		

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2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

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Intersection #18 Gothard Street at Driveway No. 1

****

Average Delay (sec/veh): 2.2 Worst Case Level Of Service: B[13.9]

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 2	0	0	0 0 1	1	0	1 0 0	0	1	0 0 0	0	0
Volume Module:												
Base Vol:	42	793	0	0	442	89	128	0	93	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	42	793	0	0	442	89	128	0	93	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	42	793	0	0	442	89	128	0	93	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	42	793	0	0	442	89	128	0	93	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	42	793	0	0	442	89	128	0	93	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	xxxx	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	531	xxxx	xxxxx	xxxx	xxxx	xxxxx	967	xxxx	266	xxxx	xxxx	xxxxx
Potent Cap.:	1047	xxxx	xxxxx	xxxx	xxxx	xxxxx	255	xxxx	739	xxxx	xxxx	xxxxx
Move Cap.:	1047	xxxx	xxxxx	xxxx	xxxx	xxxxx	248	xxxx	739	xxxx	xxxx	xxxxx
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	445	306	xxxxx	275	296	xxxxx
Volume/Cap:	0.04	xxxx	xxxx	xxxx	xxxx	xxxx	0.29	xxxx	0.13	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	1.2	xxxx	0.4	xxxx	xxxx	xxxxx
Control Del:	8.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	16.3	xxxx	10.6	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	C	*	B	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			13.9			xxxxxx		
ApproachLOS:	*			*			B			*		

****

Note: Queue reported is the number of cars per lane.

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PM Existing Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

****

Intersection #19 Gothard Street at Driveway No. 2/Center Avenue

****

Cycle (sec):	100	Critical Vol./Cap.(X):	0.699
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	B

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	0	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	48	512	232	178	295	38	54	90	67	397	84	286
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	48	512	232	178	295	38	54	90	67	397	84	286
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	48	512	232	178	295	38	54	90	67	397	84	286
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	48	512	232	178	295	38	54	90	67	397	84	286
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	48	512	232	178	295	38	54	90	67	397	84	286
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	48	512	232	178	295	38	54	90	67	397	84	286
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.38	0.62	1.00	1.77	0.23	1.00	0.57	0.43	1.00	1.00	1.00
Final Sat.:	1700	2340	1060	1700	3012	388	1700	975	725	1700	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.03	0.22	0.22	0.10	0.10	0.10	0.03	0.09	0.09	0.23	0.05	0.17
Crit Moves:		****		****				****		****		

****

PM Existing Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #20 Gothard Street at Driveway No. 3

****

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: B[14.1]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 2	0 0		0 0 1	1 0		0 0 1!	0 0		0 0 0	0 0	
Volume Module:												
Base Vol:	8	795	0	0	803	1	3	0	13	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	795	0	0	803	1	3	0	13	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	8	795	0	0	803	1	3	0	13	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	8	795	0	0	803	1	3	0	13	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	8	795	0	0	803	1	3	0	13	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	804	xxxx	xxxxx	xxxx	xxxx	xxxxx	1217	1615	402	xxxx	xxxx	xxxxx
Potent Cap.:	829	xxxx	xxxxx	xxxx	xxxx	xxxxx	176	105	604	xxxx	xxxx	xxxxx
Move Cap.:	829	xxxx	xxxxx	xxxx	xxxx	xxxxx	175	104	604	xxxx	xxxx	xxxxx
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.02	0.00	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	413	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	14.1	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			14.1			xxxxxx		
ApproachLOS:	*			*			B			*		

****

Note: Queue reported is the number of cars per lane.

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PM Existing Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #21 Gothard Street at Edinger Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.684
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	132	597	180	238	498	131	128	794	96	120	1065	175
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	132	597	180	238	498	131	128	794	96	120	1065	175
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	132	597	180	238	498	131	128	794	96	120	1065	175
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	132	597	180	238	498	131	128	794	96	120	1065	175
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	132	597	180	238	498	131	128	794	96	120	1065	175
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	132	597	180	238	498	131	128	794	96	120	1065	175
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.58	0.42	1.00	2.68	0.32	1.00	2.58	0.42
Final Sat.:	1700	3400	1700	1700	2692	708	1700	4550	550	1700	4380	720
Capacity Analysis Module:												
Vol/Sat:	0.08	0.18	0.11	0.14	0.19	0.18	0.08	0.17	0.17	0.07	0.24	0.24
Crit Moves:		****		****			****				****	

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #22 Gothard Street at Heil Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.537
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	25	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	153	793	162	60	575	117	103	474	110	111	537	72
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	153	793	162	60	575	117	103	474	110	111	537	72
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	153	793	162	60	575	117	103	474	110	111	537	72
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	153	793	162	60	575	117	103	474	110	111	537	72
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	153	793	162	60	575	117	103	474	110	111	537	72
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	153	793	162	60	575	117	103	474	110	111	537	72
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	3400	1700	1700	3400	1700	1700	3400	1700	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.09	0.23	0.10	0.04	0.17	0.07	0.06	0.14	0.06	0.07	0.16	0.04
Crit Moves:		****			****			****			****	

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #23 I-405 SB Ramps at Center Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.842
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	63	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Permitted		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	2	0 0	0 1	1	0 2	0 0	0 0	2	0 1
Volume Module:												
Base Vol:	0	0	0	710	0	293	447	560	0	0	448	545
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	710	0	293	447	560	0	0	448	545
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	710	0	293	447	560	0	0	448	545
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	710	0	293	447	560	0	0	448	545
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	710	0	293	447	560	0	0	448	545
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	710	0	293	447	560	0	0	448	545
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	3400	0	1700	1700	3400	0	0	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.21	0.00	0.17	0.26	0.16	0.00	0.00	0.13	0.32
Crit Moves:				****			****					****

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2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #24 Beach Boulevard at McFadden Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.755
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	2 0	3 1	0	2 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	152	2426	286	179	1600	214	344	406	133	324	321	118
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	152	2426	286	179	1600	214	344	406	133	324	321	118
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	152	2426	286	179	1600	214	344	406	133	324	321	118
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	152	2426	286	179	1600	214	344	406	133	324	321	118
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	152	2426	286	179	1600	214	344	406	133	324	321	118
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	152	2426	286	179	1600	214	344	406	133	324	321	118
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.58	0.42	2.00	3.53	0.47	2.00	1.51	0.49	2.00	1.46	0.54
Final Sat.:	3400	6083	717	3400	5998	802	3400	2561	839	3400	2486	914
Capacity Analysis Module:												
Vol/Sat:	0.04	0.40	0.40	0.05	0.27	0.27	0.10	0.16	0.16	0.10	0.13	0.13
Crit Moves:		****		****				****		****		

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

****

Intersection #25 Beach Boulevard at Center Avenue

****

Cycle (sec):	100	Critical Vol./Cap.(X):	0.701
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	C

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 0	0	0 0	4 0	1	2 0	0 0	2	0 0	0 0	0
Volume Module:												
Base Vol:	0	2460	0	0	2238	982	292	0	983	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2460	0	0	2238	982	292	0	983	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	2460	0	0	2238	982	292	0	983	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2460	0	0	2238	0	292	0	983	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2460	0	0	2238	0	292	0	983	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2460	0	0	2238	0	292	0	983	0	0	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.00	0.00	0.00	4.00	1.00	2.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	0	6800	0	0	6800	1700	3400	0	3400	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.36	0.00	0.00	0.33	0.00	0.09	0.00	0.29	0.00	0.00	0.00
Crit Moves:		****		****					****			

****

PM Existing Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #26 Beach Boulevard at Edinger Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.794
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	4 0	2	2 0	3 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	353	1854	494	346	2266	569	291	763	255	261	655	213
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	353	1854	494	346	2266	569	291	763	255	261	655	213
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	353	1854	494	346	2266	569	291	763	255	261	655	213
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	353	1854	494	346	2266	569	291	763	255	261	655	213
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	353	1854	494	346	2266	569	291	763	255	261	655	213
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	353	1854	494	346	2266	569	291	763	255	261	655	213
OvlAdjVol:						278			79			
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	4.00	2.00	2.00	3.00	1.00	2.00	2.00	1.00
Final Sat.:	3400	5100	1700	3400	6800	3400	3400	5100	1700	3400	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.10	0.36	0.29	0.10	0.33	0.17	0.09	0.15	0.15	0.08	0.19	0.13
OvlAdjV/S:						0.08			0.05			
Crit Moves:		****			****			****			****	

APPENDIX E

YEAR 2024 INTERSECTION LEVEL OF SERVICE CALCULATION WORKSHEETS

AM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Edwards Street at McFadden Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.628
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	2	0 1
Volume Module:												
Base Vol:	154	612	68	227	743	113	102	607	153	71	596	102
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	154	612	68	227	743	113	102	607	153	71	596	102
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	154	612	68	227	743	113	102	607	153	71	596	102
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	154	612	68	227	743	113	102	607	153	71	596	102
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	154	612	68	227	743	113	102	607	153	71	596	102
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	154	612	68	227	743	113	102	607	153	71	596	102
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.80	0.20	1.00	1.74	0.26	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	3060	340	1700	2951	449	1700	3400	1700	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.09	0.20	0.20	0.13	0.25	0.25	0.06	0.18	0.09	0.04	0.18	0.06
Crit Moves:	****				****		****				****	

AM Cum Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Edwards Street at McFadden Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.628
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	2	0 1
Volume Module:												
Base Vol:	154	612	68	227	743	113	102	614	153	71	597	102
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	154	612	68	227	743	113	102	614	153	71	597	102
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	154	612	68	227	743	113	102	614	153	71	597	102
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	154	612	68	227	743	113	102	614	153	71	597	102
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	154	612	68	227	743	113	102	614	153	71	597	102
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	154	612	68	227	743	113	102	614	153	71	597	102
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.80	0.20	1.00	1.74	0.26	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	3060	340	1700	2951	449	1700	3400	1700	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.09	0.20	0.20	0.13	0.25	0.25	0.06	0.18	0.09	0.04	0.18	0.06
Crit Moves:	****				****		****				****	

PM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Edwards Street at McFadden Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.609
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	2	0 1
Volume Module:												
Base Vol:	74	692	74	95	701	85	134	760	170	87	677	129
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	74	692	74	95	701	85	134	760	170	87	677	129
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	74	692	74	95	701	85	134	760	170	87	677	129
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	74	692	74	95	701	85	134	760	170	87	677	129
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	74	692	74	95	701	85	134	760	170	87	677	129
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	74	692	74	95	701	85	134	760	170	87	677	129
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.81	0.19	1.00	1.78	0.22	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	3072	328	1700	3032	368	1700	3400	1700	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.23	0.23	0.06	0.23	0.23	0.08	0.22	0.10	0.05	0.20	0.08
Crit Moves:		****			****			****			****	

PM Cum Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Edwards Street at McFadden Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.612
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxx
Optimal Cycle:	30	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	2	0 1	1 0	2	0 1
Volume Module:												
Base Vol:	74	692	74	95	701	85	134	771	170	87	688	129
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	74	692	74	95	701	85	134	771	170	87	688	129
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	74	692	74	95	701	85	134	771	170	87	688	129
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	74	692	74	95	701	85	134	771	170	87	688	129
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	74	692	74	95	701	85	134	771	170	87	688	129
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	74	692	74	95	701	85	134	771	170	87	688	129
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.81	0.19	1.00	1.78	0.22	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	3072	328	1700	3032	368	1700	3400	1700	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.23	0.23	0.06	0.23	0.23	0.08	0.23	0.10	0.05	0.20	0.08
Crit Moves:		****			****			****			****	

AM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Edwards Street at Edinger Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.689
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	3 0	1	1 0	3 0	1
Volume Module:												
Base Vol:	196	651	194	207	696	116	83	1221	127	78	752	116
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	196	651	194	207	696	116	83	1221	127	78	752	116
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	196	651	194	207	696	116	83	1221	127	78	752	116
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	196	651	194	207	696	116	83	1221	127	78	752	116
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	196	651	194	207	696	116	83	1221	127	78	752	116
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	196	651	194	207	696	116	83	1221	127	78	752	116
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.71	0.29	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1700	3400	1700	1700	2914	486	1700	5100	1700	1700	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.12	0.19	0.11	0.12	0.24	0.24	0.05	0.24	0.07	0.05	0.15	0.07
Crit Moves:	****				****			****			****	

AM Cum Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Edwards Street at Edinger Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.692
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	3 0	1	1 0	3 0	1
Volume Module:												
Base Vol:	196	651	198	207	696	116	83	1230	127	79	754	116
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	196	651	198	207	696	116	83	1230	127	79	754	116
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	196	651	198	207	696	116	83	1230	127	79	754	116
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	196	651	198	207	696	116	83	1230	127	79	754	116
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	196	651	198	207	696	116	83	1230	127	79	754	116
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	196	651	198	207	696	116	83	1230	127	79	754	116
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.71	0.29	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1700	3400	1700	1700	2914	486	1700	5100	1700	1700	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.12	0.19	0.12	0.12	0.24	0.24	0.05	0.24	0.07	0.05	0.15	0.07
Crit Moves:	****				****			****			****	

PM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Edwards Street at Edinger Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.635
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	3 0	1	1 0	3 0	1
Volume Module:												
Base Vol:	113	603	145	126	591	130	102	967	111	129	1256	192
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	113	603	145	126	591	130	102	967	111	129	1256	192
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	113	603	145	126	591	130	102	967	111	129	1256	192
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	113	603	145	126	591	130	102	967	111	129	1256	192
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	113	603	145	126	591	130	102	967	111	129	1256	192
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	113	603	145	126	591	130	102	967	111	129	1256	192
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.64	0.36	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1700	3400	1700	1700	2787	613	1700	5100	1700	1700	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.07	0.18	0.09	0.07	0.21	0.21	0.06	0.19	0.07	0.08	0.25	0.11
Crit Moves:	****				****		****				****	

PM Cum Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Edwards Street at Edinger Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.637
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	3 0	1	1 0	3 0	1
Volume Module:												
Base Vol:	113	603	148	126	591	130	102	978	111	132	1267	192
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	113	603	148	126	591	130	102	978	111	132	1267	192
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	113	603	148	126	591	130	102	978	111	132	1267	192
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	113	603	148	126	591	130	102	978	111	132	1267	192
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	113	603	148	126	591	130	102	978	111	132	1267	192
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	113	603	148	126	591	130	102	978	111	132	1267	192
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.64	0.36	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1700	3400	1700	1700	2787	613	1700	5100	1700	1700	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.07	0.18	0.09	0.07	0.21	0.21	0.06	0.19	0.07	0.08	0.25	0.11
Crit Moves:	****				****		****				****	

AM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Goldenwest Street at I-405 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.530
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	25	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3	0 0	0 0	2	0 1	1 0	1!	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	0	1623	0	0	999	363	387	0	438	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1623	0	0	999	363	387	0	438	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1623	0	0	999	363	387	0	438	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1623	0	0	999	0	387	0	438	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1623	0	0	999	0	387	0	438	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1623	0	0	999	0	387	0	438	0	0	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	0.00	0.00	2.00	1.00	1.41	0.00	1.59	0.00	0.00	0.00
Final Sat.:	0	5100	0	0	3400	1700	2392	0	2708	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.32	0.00	0.00	0.29	0.00	0.16	0.00	0.16	0.00	0.00	0.00
Crit Moves:		****		****					****			

AM Cum Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Goldenwest Street at I-405 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.538
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	25	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3	0 0	0 0	2	0 1	1 0	1!	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	0	1634	0	0	1011	363	387	0	468	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1634	0	0	1011	363	387	0	468	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1634	0	0	1011	363	387	0	468	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1634	0	0	1011	0	387	0	468	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1634	0	0	1011	0	387	0	468	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1634	0	0	1011	0	387	0	468	0	0	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	0.00	0.00	2.00	1.00	1.36	0.00	1.64	0.00	0.00	0.00
Final Sat.:	0	5100	0	0	3400	1700	2308	0	2792	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.32	0.00	0.00	0.30	0.00	0.17	0.00	0.17	0.00	0.00	0.00
Crit Moves:		****			****			****				

PM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Goldenwest Street at I-405 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.719
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 3	0 0	0	0 2	0 1	1	0 1!	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	0	2487	0	0	1028	573	340	0	584	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2487	0	0	1028	573	340	0	584	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	2487	0	0	1028	573	340	0	584	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2487	0	0	1028	0	340	0	584	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2487	0	0	1028	0	340	0	584	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2487	0	0	1028	0	340	0	584	0	0	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	0.00	0.00	2.00	1.00	1.10	0.00	1.90	0.00	0.00	0.00
Final Sat.:	0	5100	0	0	3400	1700	1877	0	3223	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.49	0.00	0.00	0.30	0.00	0.18	0.00	0.18	0.00	0.00	0.00
Crit Moves:		****		****					****			

PM Cum Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Goldenwest Street at I-405 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.735
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 3	0 0	0	0 2	0 1	1	0 1!	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	0	2536	0	0	1043	573	340	0	618	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2536	0	0	1043	573	340	0	618	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	2536	0	0	1043	573	340	0	618	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2536	0	0	1043	0	340	0	618	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2536	0	0	1043	0	340	0	618	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2536	0	0	1043	0	340	0	618	0	0	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	0.00	0.00	2.00	1.00	1.06	xxxx	1.94	0.00	0.00	0.00
Final Sat.:	0	5100	0	0	3400	1700	1810	0	3290	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.50	0.00	0.00	0.31	0.00	0.19	0.00	0.19	0.00	0.00	0.00
Crit Moves:		****		****					****			

AM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Goldenwest Street at Bolsa Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.676
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0 2	1	0	1 0 2	1	0	2 0 3	0	1	2 0 3	0	1
Volume Module:												
Base Vol:	77	1156	170	197	1272	91	107	399	105	403	1115	357
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	77	1156	170	197	1272	91	107	399	105	403	1115	357
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	77	1156	170	197	1272	91	107	399	105	403	1115	357
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	77	1156	170	197	1272	91	107	399	105	403	1115	357
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	77	1156	170	197	1272	91	107	399	105	403	1115	357
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	77	1156	170	197	1272	91	107	399	105	403	1115	357
OvlAdjVol:									67			
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.62	0.38	1.00	2.80	0.20	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	4446	654	1700	4760	340	3400	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.02	0.26	0.26	0.12	0.27	0.27	0.03	0.08	0.06	0.12	0.22	0.21
OvlAdjV/S:									0.04			
Crit Moves:		****			****			****			****	

AM Cum Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Goldenwest Street at Bolsa Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.678
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2	1 0	1 0	2	1 0	2 0	3	0 1	2 0	3	0 1
Volume Module:												
Base Vol:	79	1167	170	197	1313	91	107	399	113	403	1115	357
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	79	1167	170	197	1313	91	107	399	113	403	1115	357
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	79	1167	170	197	1313	91	107	399	113	403	1115	357
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	79	1167	170	197	1313	91	107	399	113	403	1115	357
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	79	1167	170	197	1313	91	107	399	113	403	1115	357
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	79	1167	170	197	1313	91	107	399	113	403	1115	357
OvlAdjVol:									73			
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.62	0.38	1.00	2.81	0.19	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	4452	648	1700	4769	331	3400	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.02	0.26	0.26	0.12	0.28	0.28	0.03	0.08	0.07	0.12	0.22	0.21
OvlAdjV/S:									0.04			
Crit Moves:		****			****			****			****	

AM Cum Plus Project
2.13.3396.2 Goldenwest College
Mitigation

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Goldenwest Street at Bolsa Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.620
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2	1 0	2 0	2	1 0	2 0	3	0 1	2 0	3	0 1
Volume Module:												
Base Vol:	79	1167	170	197	1313	91	107	399	113	403	1115	357
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	79	1167	170	197	1313	91	107	399	113	403	1115	357
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	79	1167	170	197	1313	91	107	399	113	403	1115	357
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	79	1167	170	197	1313	91	107	399	113	403	1115	357
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	79	1167	170	197	1313	91	107	399	113	403	1115	357
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	79	1167	170	197	1313	91	107	399	113	403	1115	357
OvlAdjVol:									73			
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.62	0.38	2.00	2.81	0.19	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	4452	648	3400	4769	331	3400	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.02	0.26	0.26	0.06	0.28	0.28	0.03	0.08	0.07	0.12	0.22	0.21
OvlAdjV/S:									0.04			
Crit Moves:		****			****			****			****	

PM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Goldenwest Street at Bolsa Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.976
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	176	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	2 1	0	1 0	2 1	0	2 0	3 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	288	1684	301	137	1331	103	278	1103	178	361	831	637
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	288	1684	301	137	1331	103	278	1103	178	361	831	637
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	288	1684	301	137	1331	103	278	1103	178	361	831	637
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	288	1684	301	137	1331	103	278	1103	178	361	831	637
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	288	1684	301	137	1331	103	278	1103	178	361	831	637
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	288	1684	301	137	1331	103	278	1103	178	361	831	637
OvlAdjVol:									34			
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.55	0.45	1.00	2.78	0.22	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	4327	773	1700	4734	366	3400	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.08	0.39	0.39	0.08	0.28	0.28	0.08	0.22	0.10	0.11	0.16	0.37
OvlAdjV/S:									0.02			
Crit Moves:		****			****			****				****

PM Cum Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Goldenwest Street at Bolsa Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.986
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0 2	1	0	1 0 2	1	0	2 0 3	0	1	2 0 3	0	1
Volume Module:												
Base Vol:	300	1733	301	137	1380	103	278	1103	190	361	831	637
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	300	1733	301	137	1380	103	278	1103	190	361	831	637
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	300	1733	301	137	1380	103	278	1103	190	361	831	637
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	300	1733	301	137	1380	103	278	1103	190	361	831	637
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	300	1733	301	137	1380	103	278	1103	190	361	831	637
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	300	1733	301	137	1380	103	278	1103	190	361	831	637
OvlAdjVol:									40			
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.56	0.44	1.00	2.79	0.21	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	4345	755	1700	4746	354	3400	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.09	0.40	0.40	0.08	0.29	0.29	0.08	0.22	0.11	0.11	0.16	0.37
OvlAdjV/S:									0.02			
Crit Moves:		****			****			****				****

PM Cum Plus Project
2.13.3396.2 Goldenwest College
Mitigation

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Goldenwest Street at Bolsa Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.946
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	125	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0 2	1	0	2 0 2	1	0	2 0 3	0	1	2 0 3	0	1
Volume Module:												
Base Vol:	300	1733	301	137	1380	103	278	1103	190	361	831	637
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	300	1733	301	137	1380	103	278	1103	190	361	831	637
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	300	1733	301	137	1380	103	278	1103	190	361	831	637
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	300	1733	301	137	1380	103	278	1103	190	361	831	637
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	300	1733	301	137	1380	103	278	1103	190	361	831	637
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	300	1733	301	137	1380	103	278	1103	190	361	831	637
OvlAdjVol:									40			
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.56	0.44	2.00	2.79	0.21	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3400	4345	755	3400	4746	354	3400	5100	1700	3400	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.09	0.40	0.40	0.04	0.29	0.29	0.08	0.22	0.11	0.11	0.16	0.37
OvlAdjV/S:									0.02			
Crit Moves:		****			****			****				****

AM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Goldenwest Street at McFadden Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.723
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	188	1066	64	221	1368	102	137	578	126	177	474	169
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	188	1066	64	221	1368	102	137	578	126	177	474	169
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	188	1066	64	221	1368	102	137	578	126	177	474	169
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	188	1066	64	221	1368	102	137	578	126	177	474	169
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	188	1066	64	221	1368	102	137	578	126	177	474	169
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	188	1066	64	221	1368	102	137	578	126	177	474	169
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.79	0.21	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	5100	1700	1700	4746	354	1700	3400	1700	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.11	0.21	0.04	0.13	0.29	0.29	0.08	0.17	0.07	0.10	0.14	0.10
Crit Moves:	****				****			****			****	

AM Cum Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Goldenwest Street at McFadden Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.737
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	189	1077	66	230	1409	102	137	579	132	186	474	171
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	189	1077	66	230	1409	102	137	579	132	186	474	171
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	189	1077	66	230	1409	102	137	579	132	186	474	171
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	189	1077	66	230	1409	102	137	579	132	186	474	171
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	189	1077	66	230	1409	102	137	579	132	186	474	171
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	189	1077	66	230	1409	102	137	579	132	186	474	171
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.80	0.20	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	5100	1700	1700	4756	344	1700	3400	1700	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.11	0.21	0.04	0.14	0.30	0.30	0.08	0.17	0.08	0.11	0.14	0.10
Crit Moves:	****				****			****			****	

AM Cum Plus Project
2.13.3396.2 Goldenwest College
Mitigation

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Goldenwest Street at McFadden Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.737
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	189	1077	66	230	1409	102	137	579	132	186	474	171
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	189	1077	66	230	1409	102	137	579	132	186	474	171
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	189	1077	66	230	1409	102	137	579	132	186	474	171
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	189	1077	66	230	1409	102	137	579	132	186	474	171
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	189	1077	66	230	1409	102	137	579	132	186	474	171
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	189	1077	66	230	1409	102	137	579	132	186	474	171
OvlAdjVol:												0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.80	0.20	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	5100	1700	1700	4756	344	1700	3400	1700	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.11	0.21	0.04	0.14	0.30	0.30	0.08	0.17	0.08	0.11	0.14	0.10
OvlAdjV/S:												0.00
Crit Moves:	****				****			****			****	

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2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Goldenwest Street at McFadden Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.882
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxx
Optimal Cycle:	77	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	245	1500	120	265	1590	93	168	665	118	205	611	440
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	245	1500	120	265	1590	93	168	665	118	205	611	440
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	245	1500	120	265	1590	93	168	665	118	205	611	440
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	245	1500	120	265	1590	93	168	665	118	205	611	440
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	245	1500	120	265	1590	93	168	665	118	205	611	440
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	245	1500	120	265	1590	93	168	665	118	205	611	440
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.83	0.17	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	5100	1700	1700	4818	282	1700	3400	1700	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.14	0.29	0.07	0.16	0.33	0.33	0.10	0.20	0.07	0.12	0.18	0.26
Crit Moves:	****				****		****					****

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2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Goldenwest Street at McFadden Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.907
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	91	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0 3	0	1	1 0 2	1	0	1 0 2	0	1	1 0 2	0	1
Volume Module:												
Base Vol:	250	1534	128	297	1619	93	168	672	122	212	617	468
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	250	1534	128	297	1619	93	168	672	122	212	617	468
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	250	1534	128	297	1619	93	168	672	122	212	617	468
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	250	1534	128	297	1619	93	168	672	122	212	617	468
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	250	1534	128	297	1619	93	168	672	122	212	617	468
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	250	1534	128	297	1619	93	168	672	122	212	617	468
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.84	0.16	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	5100	1700	1700	4823	277	1700	3400	1700	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.15	0.30	0.08	0.17	0.34	0.34	0.10	0.20	0.07	0.12	0.18	0.28
Crit Moves:	****				****		****					****

PM Cum Plus Project
2.13.3396.2 Goldenwest College
Mitigation

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Goldenwest Street at McFadden Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.855
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	67	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	250	1534	128	297	1619	93	168	672	122	212	617	468
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	250	1534	128	297	1619	93	168	672	122	212	617	468
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	250	1534	128	297	1619	93	168	672	122	212	617	468
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	250	1534	128	297	1619	93	168	672	122	212	617	468
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	250	1534	128	297	1619	93	168	672	122	212	617	468
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	250	1534	128	297	1619	93	168	672	122	212	617	468
OvlAdjVol:												171
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.84	0.16	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	5100	1700	1700	4823	277	1700	3400	1700	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.15	0.30	0.08	0.17	0.34	0.34	0.10	0.20	0.07	0.12	0.18	0.28
OvlAdjV/S:												0.10
Crit Moves:	****				****			****			****	

AM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Goldenwest Street at Driveway No. 12

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[12.1]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 2	1	0	0 0 3	0	0	0 0 0	0	0	0 0 0	0	1
Volume Module:												
Base Vol:	0 1423		13	0 1680		0	0 0		0	0 0		29
Growth Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
Initial Bse:	0 1423		13	0 1680		0	0 0		0	0 0		29
Added Vol:	0 0		0	0 0		0	0 0		0	0 0		0
PasserByVol:	0 0		0	0 0		0	0 0		0	0 0		0
Initial Fut:	0 1423		13	0 1680		0	0 0		0	0 0		29
User Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
PHF Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
PHF Volume:	0 1423		13	0 1680		0	0 0		0	0 0		29
Reduct Vol:	0 0		0	0 0		0	0 0		0	0 0		0
FinalVolume:	0 1423		13	0 1680		0	0 0		0	0 0		29
Critical Gap Module:												
Critical Gp:	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		6.9
FollowUpTim:	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		3.3
Capacity Module:												
Cnflict Vol:	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		481
Potent Cap.:	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		537
Move Cap.:	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		537
Volume/Cap:	xxxx xxxx		xxxx	xxxx xxxx		xxxx	xxxx xxxx		xxxx	xxxx xxxx		0.05
Level Of Service Module:												
2Way95thQ:	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		0.2
Control Del:	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		12.1
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	B
Movement:	LT - LTR		- RT	LT - LTR		- RT	LT - LTR		- RT	LT - LTR		- RT
Shared Cap.:	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx
SharedQueue:	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx
Shrd ConDel:	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			12.1		
ApproachLOS:	*			*			*			B		

Note: Queue reported is the number of cars per lane.

AM Cum Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #6 Goldenwest Street at Driveway No. 12

****

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[12.2]

****

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	2	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	1
Volume Module:																				
Base Vol:	0	1435		19		0	1736		0		0		0		0	0		0		31
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	0	1435		19		0	1736		0		0		0		0	0		0		31
Added Vol:	0	0		0		0	0		0		0		0		0	0		0		0
PasserByVol:	0	0		0		0	0		0		0		0		0	0		0		0
Initial Fut:	0	1435		19		0	1736		0		0		0		0	0		0		31
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Volume:	0	1435		19		0	1736		0		0		0		0	0		0		31
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0		0
FinalVolume:	0	1435		19		0	1736		0		0		0		0	0		0		31
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx			6.9
FollowUpTim:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx			3.3
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx			488
Potent Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx			531
Move Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx			531
Volume/Cap:	xxxx	xxxx		xxxx		xxxx	xxxx		xxxx		xxxx	xxxx		xxxx		xxxx	xxxx			0.06
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx			0.2
Control Del:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx			12.2
LOS by Move:	*	*		*		*	*		*		*	*		*		*	*			B
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx	
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
Shrd ConDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
Shared LOS:	*	*		*		*	*		*		*	*		*		*	*		*	
ApproachDel:	xxxxxx			xxxxxx			xxxxxx					12.2								
ApproachLOS:	*			*			*					B								

****

Note: Queue reported is the number of cars per lane.

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PM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Goldenwest Street at Driveway No. 12

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: C[15.2]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	2	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	1
Volume Module:																				
Base Vol:	0	1901			15	0	2015			0	0		0		0	0		0		70
Growth Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	0	1901			15	0	2015			0	0		0		0	0		0		70
Added Vol:	0	0			0	0	0			0	0		0		0	0		0		0
PasserByVol:	0	0			0	0	0			0	0		0		0	0		0		0
Initial Fut:	0	1901			15	0	2015			0	0		0		0	0		0		70
User Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00		1.00		1.00
PHF Volume:	0	1901			15	0	2015			0	0		0		0	0		0		70
Reduct Vol:	0	0			0	0	0			0	0		0		0	0		0		0
FinalVolume:	0	1901			15	0	2015			0	0		0		0	0		0		70
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx	xxxx			6.9
FollowUpTim:	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx	xxxx			3.3
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			641
Potent Cap.:	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			422
Move Cap.:	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			422
Volume/Cap:	xxxx	xxxx			xxxx	xxxx	xxxx			xxxx	xxxx	xxxx			xxxx	xxxx	xxxx			0.17
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			0.6
Control Del:	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx	xxxx			15.2
LOS by Move:	*	*			*	*	*			*	*	*			*	*	*			C
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx
SharedQueue:	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx
Shrd ConDel:	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx
Shared LOS:	*	*			*	*	*			*	*	*			*	*	*			*
ApproachDel:	xxxxxx					xxxxxx					xxxxxx					15.2				
ApproachLOS:	*					*					*					C				

Note: Queue reported is the number of cars per lane.

PM Cum Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #6 Goldenwest Street at Driveway No. 12

****

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: C[15.7]

****

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	2	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	1
Volume Module:																				
Base Vol:	0	1941			19	0	2055			0	0		0		0	0		0		76
Growth Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	0	1941			19	0	2055			0	0		0		0	0		0		76
Added Vol:	0	0			0	0	0			0	0		0		0	0		0		0
PasserByVol:	0	0			0	0	0			0	0		0		0	0		0		0
Initial Fut:	0	1941			19	0	2055			0	0		0		0	0		0		76
User Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00		1.00		1.00
PHF Volume:	0	1941			19	0	2055			0	0		0		0	0		0		76
Reduct Vol:	0	0			0	0	0			0	0		0		0	0		0		0
FinalVolume:	0	1941			19	0	2055			0	0		0		0	0		0		76
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx		xxxx		xxxxx	xxxxx		xxxx		6.9
FollowUpTim:	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx		xxxx		xxxxx	xxxxx		xxxx		3.3
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx		xxxx		xxxxx	xxxx		xxxx		657
Potent Cap.:	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx		xxxx		xxxxx	xxxx		xxxx		413
Move Cap.:	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx		xxxx		xxxxx	xxxx		xxxx		413
Volume/Cap:	xxxx	xxxx			xxxx	xxxx	xxxx			xxxx	xxxx		xxxx		xxxx	xxxx		xxxx		0.18
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx		xxxx		xxxxx	xxxx		xxxx		0.7
Control Del:	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx		xxxx		xxxxx	xxxxx		xxxx		15.7
LOS by Move:	*	*			*	*	*			*	*		*		*	*		*		C
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx		xxxx		xxxxx	xxxx		xxxx		xxxxx
SharedQueue:	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx		xxxx		xxxxx	xxxxx		xxxx		xxxxx
Shrd ConDel:	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx		xxxx		xxxxx	xxxxx		xxxx		xxxxx
Shared LOS:	*	*			*	*	*			*	*		*		*	*		*		*
ApproachDel:	xxxxxx					xxxxxx					xxxxxx					15.7				
ApproachLOS:	*					*					*					C				

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Note: Queue reported is the number of cars per lane.

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AM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Goldenwest Street at Driveway No. 11

Average Delay (sec/veh): 1.0 Worst Case Level Of Service: F[61.3]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0	2 1	0	1 0	2 1	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	9	1428	5	83	1594	4	5	0	22	1	0	4
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	1428	5	83	1594	4	5	0	22	1	0	4
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	1428	5	83	1594	4	5	0	22	1	0	4
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	1428	5	83	1594	4	5	0	22	1	0	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	9	1428	5	83	1594	4	5	0	22	1	0	4
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	1598	xxxx	xxxxx	1433	xxxx	xxxxx	2256	3213	533	2146	3213	479
Potent Cap.:	415	xxxx	xxxxx	480	xxxx	xxxxx	23	10	496	28	10	539
Move Cap.:	415	xxxx	xxxxx	480	xxxx	xxxxx	20	8	496	23	8	539
Volume/Cap:	0.02	xxxx	xxxx	0.17	xxxx	xxxx	0.26	0.00	0.04	0.04	0.00	0.01
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	0.6	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	13.9	xxxx	xxxxx	14.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*	*	B	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	90	xxxxx	xxxx	98	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	1.1	xxxxx	xxxxx	0.2	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	61.3	xxxxx	xxxxx	43.8	xxxxx
Shared LOS:	*	*	*	*	*	*	*	F	*	*	E	*
ApproachDel:	xxxxxx			xxxxxx			61.3			43.8		
ApproachLOS:	*			*			F			E		

Note: Queue reported is the number of cars per lane.

AM Cum Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

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Intersection #7 Goldenwest Street at Driveway No. 11

****

Average Delay (sec/veh): 1.5 Worst Case Level Of Service: F[99.3]

****

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	1	0	2	1	0	1	0	2	1	0	0	0	1!	0	0	0	0	1!	0	0
Volume Module:																				
Base Vol:	9	1443		11		109	1624		4		5		0		22	4		0		7
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	9	1443		11		109	1624		4		5		0		22	4		0		7
Added Vol:	0	0		0		0	0		0		0		0		0	0		0		0
PasserByVol:	0	0		0		0	0		0		0		0		0	0		0		0
Initial Fut:	9	1443		11		109	1624		4		5		0		22	4		0		7
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Volume:	9	1443		11		109	1624		4		5		0		22	4		0		7
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0		0
FinalVolume:	9	1443		11		109	1624		4		5		0		22	4		0		7
Critical Gap Module:																				
Critical Gp:	4.1	xxxx	xxxxx			4.1	xxxx	xxxxx			7.5		6.5		6.9	7.5		6.5		6.9
FollowUpTim:	2.2	xxxx	xxxxx			2.2	xxxx	xxxxx			3.5		4.0		3.3	3.5		4.0		3.3
Capacity Module:																				
Cnflict Vol:	1628	xxxx	xxxxx			1454	xxxx	xxxxx			2343		3316		543	2226		3313		487
Potent Cap.:	405	xxxx	xxxxx			471	xxxx	xxxxx			20		9		489	24		9		532
Move Cap.:	405	xxxx	xxxxx			471	xxxx	xxxxx			16		6		489	19		6		532
Volume/Cap:	0.02	xxxx	xxxx			0.23	xxxx	xxxx			0.32		0.00		0.05	0.21		0.00		0.01
Level Of Service Module:																				
2Way95thQ:	0.1	xxxx	xxxxx			0.9	xxxx	xxxxx			xxxx		xxxx		xxxxx	xxxx		xxxx		xxxxx
Control Del:	14.1	xxxx	xxxxx			14.9	xxxx	xxxxx			xxxxx		xxxx		xxxxx	xxxxx		xxxx		xxxxx
LOS by Move:	B	*		*		B	*		*		*		*		*	*		*		*
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx		75		xxxxx	xxxx		49		xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		1.4		xxxxx	xxxxx		0.8		xxxxx
Shrd ConDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		78.3		xxxxx	xxxxx		99.3		xxxxx
Shared LOS:	*	*		*		*	*		*		*		F		*	*		F		*
ApproachDel:	xxxxxx					xxxxxx					78.3					99.3				
ApproachLOS:	*					*					F					F				

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Note: Queue reported is the number of cars per lane.

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AM Cum Plus Project
2.13.3396.2 Goldenwest College
Mitigation

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #7 Goldenwest Street at Driveway No. 11

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: D[27.1]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0	2 1	0	1 0	2 1	0	0 0	1! 0	0	0 0	0 0	1
Volume Module:												
Base Vol:	9	1443	11	109	1624	4	5	0	22	0	0	7
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	1443	11	109	1624	4	5	0	22	0	0	7
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	1443	11	109	1624	4	5	0	22	0	0	7
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	1443	11	109	1624	4	5	0	22	0	0	7
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	9	1443	11	109	1624	4	5	0	22	0	0	7
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.5	6.5	6.9	xxxxx	xxxx	6.9
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	3.3
Capacity Module:												
Cnflict Vol:	1628	xxxx	xxxxx	1454	xxxx	xxxxx	2343	3316	543	xxxx	xxxx	487
Potent Cap.:	405	xxxx	xxxxx	471	xxxx	xxxxx	20	9	489	xxxx	xxxx	532
Move Cap.:	405	xxxx	xxxxx	471	xxxx	xxxxx	16	6	489	xxxx	xxxx	532
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	51	43	xxxxx	88	57	xxxxx
Volume/Cap:	0.02	xxxx	xxxx	0.23	xxxx	xxxx	0.10	0.00	0.05	xxxx	xxxx	0.01
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	0.9	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	0.0
Control Del:	14.1	xxxx	xxxxx	14.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	11.9
LOS by Move:	B	*	*	B	*	*	*	*	*	*	*	B
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	189	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.5	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	27.1	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	D	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			27.1			11.9		
ApproachLOS:	*			*			D			B		

Note: Queue reported is the number of cars per lane.

PM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #7 Goldenwest Street at Driveway No. 11

Average Delay (sec/veh): 20.9 Worst Case Level Of Service: F[1391.5]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	1	0	2	1	0		1	0	2	1	0		0	0	1!	0	0		0	0	1!	0	0	
Volume Module:																								
Base Vol:	19	1861		24			161	1808		8			1		0		13		14		0		41	
Growth Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	19	1861		24			161	1808		8			1		0		13		14		0		41	
User Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
PHF Volume:	19	1861		24			161	1808		8			1		0		13		14		0		41	
Reduct Vol:	0	0		0			0	0		0			0		0		0		0		0		0	
FinalVolume:	19	1861		24			161	1808		8			1		0		13		14		0		41	
Critical Gap Module:																								
Critical Gp:	4.1	xxxx	xxxxx				4.1	xxxx	xxxxx				7.5		6.5		6.9		7.5		6.5		6.9	
FollowUpTim:	2.2	xxxx	xxxxx				2.2	xxxx	xxxxx				3.5		4.0		3.3		3.5		4.0		3.3	
Capacity Module:																								
Cnflict Vol:	1816	xxxx	xxxxx				1885	xxxx	xxxxx				2792		4057		607		2836		4049		632	
Potent Cap.:	342	xxxx	xxxxx				322	xxxx	xxxxx				9		3		445		8		3		428	
Move Cap.:	342	xxxx	xxxxx				322	xxxx	xxxxx				5		1		445		5		1		428	
Volume/Cap:	0.06	xxxx	xxxx				0.50	xxxx	xxxx				0.21		0.00		0.03		3.00		0.00		0.10	
Level Of Service Module:																								
2Way95thQ:	0.2	xxxx	xxxxx				2.7	xxxx	xxxxx				xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx	
Control Del:	16.1	xxxx	xxxxx				26.8	xxxx	xxxxx				xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
LOS by Move:	C	*		*			D	*		*			*		*		*		*		*		*	
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx		58		xxxxx		xxxx		18		xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx		0.8		xxxxx		xxxxx		7.4		xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx		86.2		xxxxx		xxxxx		1391		xxxxx	
Shared LOS:	*	*		*			*	*		*			*		F		*		*		F		*	
ApproachDel:	xxxxxx						xxxxxx						86.2						1391.5					
ApproachLOS:	*						*						F						F					

Note: Queue reported is the number of cars per lane.

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PM Cum Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #7 Goldenwest Street at Driveway No. 11

Average Delay (sec/veh): 59.2 Worst Case Level Of Service: F[3094.5]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	1	0	2	1	0	1	0	2	1	0	0	0	1!	0	0	0	0	1!	0	0
Volume Module:																				
Base Vol:	19	1894		28		179	1829		8		1		0		13	23		0		52
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	19	1894		28		179	1829		8		1		0		13	23		0		52
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Volume:	19	1894		28		179	1829		8		1		0		13	23		0		52
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0		0
FinalVolume:	19	1894		28		179	1829		8		1		0		13	23		0		52
Critical Gap Module:																				
Critical Gp:	4.1	xxxx	xxxxx			4.1	xxxx	xxxxx			7.5		6.5		6.9	7.5		6.5		6.9
FollowUpTim:	2.2	xxxx	xxxxx			2.2	xxxx	xxxxx			3.5		4.0		3.3	3.5		4.0		3.3
Capacity Module:																				
Cnflict Vol:	1837	xxxx	xxxxx			1922	xxxx	xxxxx			2860		4151		614	2914		4141		645
Potent Cap.:	336	xxxx	xxxxx			312	xxxx	xxxxx			8		2		440	7		2		420
Move Cap.:	336	xxxx	xxxxx			312	xxxx	xxxxx			4		1		440	4		1		420
Volume/Cap:	0.06	xxxx	xxxx			0.57	xxxx	xxxx			0.28		0.00		0.03	6.33		0.00		0.12
Level Of Service Module:																				
2Way95thQ:	0.2	xxxx	xxxxx			3.4	xxxx	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
Control Del:	16.4	xxxx	xxxxx			31.1	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
LOS by Move:	C	*		*		D	*		*		*	*		*		*	*		*	
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx		46		xxxxx	xxxx		12		xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		1.0		xxxxx	xxxxx		10.6		xxxxx
Shrd ConDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		116		xxxxx	xxxxx		3094		xxxxx
Shared LOS:	*	*		*		*	*		*		*		F		*	*		F		*
ApproachDel:	xxxxxx					xxxxxx					115.5					3094.5				
ApproachLOS:	*					*					F					F				

Note: Queue reported is the number of cars per lane.

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PM Cum Plus Project
2.13.3396.2 Goldenwest College
Mitigation

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #7 Goldenwest Street at Driveway No. 11

Average Delay (sec/veh): 1.8 Worst Case Level Of Service: D[31.1]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	1	0	2	1	0		1	0	2	1	0		0	0	1!	0	0		0	0	0	0	1	
Volume Module:																								
Base Vol:	19	1894		28			179	1829		8			1		0		13		0		0		52	
Growth Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	19	1894		28			179	1829		8			1		0		13		0		0		52	
User Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
PHF Volume:	19	1894		28			179	1829		8			1		0		13		0		0		52	
Reduct Vol:	0	0		0			0	0		0			0		0		0		0		0		0	
FinalVolume:	19	1894		28			179	1829		8			1		0		13		0		0		52	
Critical Gap Module:																								
Critical Gp:	4.1	xxxx	xxxxx				4.1	xxxx	xxxxx				7.5		6.5		6.9		xxxxx	xxxx			6.9	
FollowUpTim:	2.2	xxxx	xxxxx				2.2	xxxx	xxxxx				3.5		4.0		3.3		xxxxx	xxxx			3.3	
Capacity Module:																								
Cnflict Vol:	1837	xxxx	xxxxx				1922	xxxx	xxxxx				2860		4151		614		xxxx	xxxx			645	
Potent Cap.:	336	xxxx	xxxxx				312	xxxx	xxxxx				8		2		440		xxxx	xxxx			420	
Move Cap.:	336	xxxx	xxxxx				312	xxxx	xxxxx				4		1		440		xxxx	xxxx			420	
Total Cap:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				17		0		xxxxx		37		13		xxxxx	
Volume/Cap:	0.06	xxxx	xxxx				0.57	xxxx	xxxx				0.06		xxxx		0.03		xxxx	xxxx			0.12	
Level Of Service Module:																								
2Way95thQ:	0.2	xxxx	xxxxx				3.4	xxxx	xxxxx				xxxx		xxxx		xxxxx		xxxx	xxxx			0.4	
Control Del:	16.4	xxxx	xxxxx				31.1	xxxx	xxxxx				xxxxx		xxxx		xxxxx		xxxxx	xxxx			14.8	
LOS by Move:	C	*		*			D	*		*			*		*		*		*		*		B	
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx		159		xxxxx		xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx		0.3		xxxxx		xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx		29.8		xxxxx		xxxxx	xxxx	xxxxx			
Shared LOS:	*	*		*			*	*		*			*		D		*		*		*		*	
ApproachDel:	xxxxxx						xxxxxx						29.8						14.8					
ApproachLOS:	*						*						D						B					

Note: Queue reported is the number of cars per lane.

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AM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Goldenwest Street at Driveway No. 10

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: B[11.8]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	2	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	1
Volume Module:																				
Base Vol:	0	1430		13		0	1585		0		0		0		0	0		0		4
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	0	1430		13		0	1585		0		0		0		0	0		0		4
Added Vol:	0	0		0		0	0		0		0		0		0	0		0		0
PasserByVol:	0	0		0		0	0		0		0		0		0	0		0		0
Initial Fut:	0	1430		13		0	1585		0		0		0		0	0		0		4
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Volume:	0	1430		13		0	1585		0		0		0		0	0		0		4
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0		0
FinalVolume:	0	1430		13		0	1585		0		0		0		0	0		0		4
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx			6.9
FollowUpTim:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx			3.3
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx			483
Potent Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx			535
Move Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx			535
Volume/Cap:	xxxx	xxxx		xxxx		xxxx	xxxx		xxxx		xxxx	xxxx		xxxx		xxxx	xxxx			0.01
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx			0.0
Control Del:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx			11.8
LOS by Move:	*	*		*		*	*		*		*	*		*		*	*			B
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx			xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx			xxxxx
Shrd ConDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx			xxxxx
Shared LOS:	*	*		*		*	*		*		*	*		*		*	*			*
ApproachDel:	xxxxxx			xxxxxx							xxxxxx						11.8			
ApproachLOS:	*			*							*						B			

Note: Queue reported is the number of cars per lane.

AM Cum Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Goldenwest Street at Driveway No. 10

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: B[11.9]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	2	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	1
Volume Module:																				
Base Vol:	0	1448			20	0	1617			0	0		0		0	0		0		6
Growth Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	0	1448			20	0	1617			0	0		0		0	0		0		6
Added Vol:	0	0			0	0	0			0	0		0		0	0		0		0
PasserByVol:	0	0			0	0	0			0	0		0		0	0		0		0
Initial Fut:	0	1448			20	0	1617			0	0		0		0	0		0		6
User Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00		1.00		1.00
PHF Volume:	0	1448			20	0	1617			0	0		0		0	0		0		6
Reduct Vol:	0	0			0	0	0			0	0		0		0	0		0		0
FinalVolume:	0	1448			20	0	1617			0	0		0		0	0		0		6
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx		xxxx		xxxxx	xxxxx		xxxx		6.9
FollowUpTim:	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx		xxxx		xxxxx	xxxxx		xxxx		3.3
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			493
Potent Cap.:	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			527
Move Cap.:	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			527
Volume/Cap:	xxxx	xxxx			xxxx	xxxx	xxxx			xxxx	xxxx	xxxx			xxxx	xxxx	xxxx			0.01
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			0.0
Control Del:	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx	xxxx			11.9
LOS by Move:	*	*			*	*	*			*	*	*			*	*	*			B
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx
SharedQueue:	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx
Shrd ConDel:	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx
Shared LOS:	*	*			*	*	*			*	*	*			*	*	*			*
ApproachDel:	xxxxxx					xxxxxx					xxxxxx					11.9				
ApproachLOS:	*					*					*					B				

Note: Queue reported is the number of cars per lane.

PM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Goldenwest Street at Driveway No. 10

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[15.7]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 2	1	0	0 0 3	0	0	0 0 0	0	0	0 0 0	0	1
Volume Module:												
Base Vol:	0	1857	9	0	1731	0	0	0	0	0	0	96
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1857	9	0	1731	0	0	0	0	0	0	96
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1857	9	0	1731	0	0	0	0	0	0	96
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1857	9	0	1731	0	0	0	0	0	0	96
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	1857	9	0	1731	0	0	0	0	0	0	96
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	624
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	434
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	434
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.22
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	0.8
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	15.7
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	C
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			15.7		
ApproachLOS:	*			*			*			C		

Note: Queue reported is the number of cars per lane.

PM Cum Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #8 Goldenwest Street at Driveway No. 10

****

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[16.1]

****

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	2	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	1
Volume Module:																				
Base Vol:	0	1888		14		0	1761		0		0		0			0		0		102
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00			1.00		1.00		1.00
Initial Bse:	0	1888		14		0	1761		0		0		0			0		0		102
Added Vol:	0	0		0		0	0		0		0		0			0		0		0
PasserByVol:	0	0		0		0	0		0		0		0			0		0		0
Initial Fut:	0	1888		14		0	1761		0		0		0			0		0		102
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00			1.00		1.00		1.00
PHF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00			1.00		1.00		1.00
PHF Volume:	0	1888		14		0	1761		0		0		0			0		0		102
Reduct Vol:	0	0		0		0	0		0		0		0			0		0		0
FinalVolume:	0	1888		14		0	1761		0		0		0			0		0		102
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		xxxx			xxxxx		xxxx		6.9
FollowUpTim:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		xxxx			xxxxx		xxxx		3.3
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx		xxxx			xxxxx		xxxx		636
Potent Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx		xxxx			xxxxx		xxxx		425
Move Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx		xxxx			xxxxx		xxxx		425
Volume/Cap:	xxxx	xxxx		xxxx		xxxx	xxxx		xxxx		xxxx		xxxx			xxxx		xxxx		0.24
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx		xxxx			xxxxx		xxxx		0.9
Control Del:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		xxxx			xxxxx		xxxx		16.1
LOS by Move:	*	*		*		*	*		*		*		*			*		*		C
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx		xxxx			xxxxx		xxxx		xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		xxxx			xxxxx		xxxx		xxxxx
Shrd ConDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx		xxxx			xxxxx		xxxx		xxxxx
Shared LOS:	*	*		*		*	*		*		*		*			*		*		*
ApproachDel:	xxxxxx					xxxxxx					xxxxxx					16.1				
ApproachLOS:	*					*					*					C				

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Note: Queue reported is the number of cars per lane.

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AM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Goldenwest Street at Driveway No. 9 (Golden West College)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.379
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	19	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2	1 0	2 0	3	0 0	0 0	0	0 0	1 0	0	0 1
Volume Module:												
Base Vol:	0	1402	41	74	1511	0	0	0	0	29	0	41
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1402	41	74	1511	0	0	0	0	29	0	41
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1402	41	74	1511	0	0	0	0	29	0	41
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1402	41	74	1511	0	0	0	0	29	0	41
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1402	41	74	1511	0	0	0	0	29	0	41
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1402	41	74	1511	0	0	0	0	29	0	41
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.91	0.09	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4955	145	3400	5100	0	0	0	0	1700	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.28	0.28	0.02	0.30	0.00	0.00	0.00	0.00	0.02	0.00	0.02
Crit Moves:		****		****								****

AM Cum Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Goldenwest Street at Driveway No. 9 (Golden West College)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.395
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	20	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0 2	1	0	2 0	3	0 0	0 0	0	0 0	1 0	0	0 1
Volume Module:												
Base Vol:	0	1424	47	104	1514	0	0	0	0	32	0	44
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1424	47	104	1514	0	0	0	0	32	0	44
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1424	47	104	1514	0	0	0	0	32	0	44
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1424	47	104	1514	0	0	0	0	32	0	44
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1424	47	104	1514	0	0	0	0	32	0	44
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1424	47	104	1514	0	0	0	0	32	0	44
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.90	0.10	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4937	163	3400	5100	0	0	0	0	1700	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.29	0.29	0.03	0.30	0.00	0.00	0.00	0.00	0.02	0.00	0.03
Crit Moves:		****		****								****

PM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Goldenwest Street at Driveway No. 9 (Golden West College)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.481
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	23	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2 1	0	2 0	3 0	0	0 0	0 0	0	1 0	0 0	1
Volume Module:												
Base Vol:	0	1790	51	85	1646	0	0	0	0	71	0	76
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1790	51	85	1646	0	0	0	0	71	0	76
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1790	51	85	1646	0	0	0	0	71	0	76
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1790	51	85	1646	0	0	0	0	71	0	76
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1790	51	85	1646	0	0	0	0	71	0	76
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1790	51	85	1646	0	0	0	0	71	0	76
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.92	0.08	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4959	141	3400	5100	0	0	0	0	1700	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.36	0.36	0.03	0.32	0.00	0.00	0.00	0.00	0.04	0.00	0.04
Crit Moves:		****		****								****

PM Cum Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Goldenwest Street at Driveway No. 9 (Golden West College)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.499
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	24	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	2 1	0	2 0	3 0	0	0 0	0 0	0	1 0	0 0	1
Volume Module:												
Base Vol:	0	1815	55	106	1655	0	0	0	0	80	0	87
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1815	55	106	1655	0	0	0	0	80	0	87
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1815	55	106	1655	0	0	0	0	80	0	87
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1815	55	106	1655	0	0	0	0	80	0	87
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1815	55	106	1655	0	0	0	0	80	0	87
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1815	55	106	1655	0	0	0	0	80	0	87
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.91	0.09	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4950	150	3400	5100	0	0	0	0	1700	0	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.37	0.37	0.03	0.32	0.00	0.00	0.00	0.00	0.05	0.00	0.05
Crit Moves:		****		****								****

AM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #10 Goldenwest Street at Driveway No. 8

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: B[11.9]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 2	1	0	0 0 3	0	0	0 0 0	0	0	0 0 0	0	1
Volume Module:												
Base Vol:	0 1419		44	0 1510		0	0	0	0	0	0	4
Growth Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
Initial Bse:	0 1419		44	0 1510		0	0	0	0	0	0	4
Added Vol:	0 0		0	0 0		0	0	0	0	0	0	0
PasserByVol:	0 0		0	0 0		0	0	0	0	0	0	0
Initial Fut:	0 1419		44	0 1510		0	0	0	0	0	0	4
User Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
PHF Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
PHF Volume:	0 1419		44	0 1510		0	0	0	0	0	0	4
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	0 1419		44	0 1510		0	0	0	0	0	0	4
Critical Gap Module:												
Critical Gp:	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		6.9
FollowUpTim:	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		3.3
Capacity Module:												
Cnflict Vol:	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		495
Potent Cap.:	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		525
Move Cap.:	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		525
Volume/Cap:	xxxx xxxx		xxxx	xxxx xxxx		xxxx	xxxx xxxx		xxxx	xxxx xxxx		0.01
Level Of Service Module:												
2Way95thQ:	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		0.0
Control Del:	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		11.9
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	B
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx	xxxx xxxx		xxxxx
SharedQueue:	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx
Shrd ConDel:	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			11.9		
ApproachLOS:	*			*			*			B		

Note: Queue reported is the number of cars per lane.

AM Cum Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

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Intersection #10 Goldenwest Street at Driveway No. 8

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Average Delay (sec/veh): 0.0 Worst Case Level Of Service: B[12.0]

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 2	1	0	0 0 3	0	0	0 0 0	0	0	0 0 0	0	1
Volume Module:												
Base Vol:	0 1445	48		0 1516	0		0 0	0		0 0	0	6
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	0 1445	48		0 1516	0		0 0	0		0 0	0	6
Added Vol:	0 0	0		0 0	0		0 0	0		0 0	0	0
PasserByVol:	0 0	0		0 0	0		0 0	0		0 0	0	0
Initial Fut:	0 1445	48		0 1516	0		0 0	0		0 0	0	6
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Volume:	0 1445	48		0 1516	0		0 0	0		0 0	0	6
Reduct Vol:	0 0	0		0 0	0		0 0	0		0 0	0	0
FinalVolume:	0 1445	48		0 1516	0		0 0	0		0 0	0	6
Critical Gap Module:												
Critical Gp:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx	6.9
FollowUpTim:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx xxxx	xxxxx	506
Potent Cap.:	xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx xxxx	xxxxx	517
Move Cap.:	xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx xxxx	xxxxx	517
Volume/Cap:	xxxx xxxx	xxxx		xxxx xxxx	xxxx		xxxx xxxx	xxxx		xxxx xxxx	xxxx	0.01
Level Of Service Module:												
2Way95thQ:	xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx xxxx	xxxxx	0.0
Control Del:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx	12.0
LOS by Move:	* *	*		* *	*		* *	*		* *	*	B
Movement:	LT - LTR	- RT		LT - LTR	- RT		LT - LTR	- RT		LT - LTR	- RT	
Shared Cap.:	xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx xxxx	xxxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx	xxxxx
Shared LOS:	* *	*		* *	*		* *	*		* *	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			12.0		
ApproachLOS:	*			*			*			B		

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Note: Queue reported is the number of cars per lane.

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PM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #10 Goldenwest Street at Driveway No. 8

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[13.8]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	2	1	0		0	0	3	0	0		0	0	0	0	0		0	0	0	0	1	
Volume Module:																								
Base Vol:	0	1841		33			0	1823		0			0		0		0		0		0		22	
Growth Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	0	1841		33			0	1823		0			0		0		0		0		0		22	
Added Vol:	0	0		0			0	0		0			0		0		0		0		0		0	
PasserByVol:	0	0		0			0	0		0			0		0		0		0		0		0	
Initial Fut:	0	1841		33			0	1823		0			0		0		0		0		0		22	
User Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
PHF Volume:	0	1841		33			0	1823		0			0		0		0		0		0		22	
Reduct Vol:	0	0		0			0	0		0			0		0		0		0		0		0	
FinalVolume:	0	1841		33			0	1823		0			0		0		0		0		0		22	
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx			6.9	
FollowUpTim:	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx			3.3	
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx			630	
Potent Cap.:	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx			429	
Move Cap.:	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx			429	
Volume/Cap:	xxxx	xxxx		xxxx			xxxx	xxxx		xxxx			xxxx	xxxx		xxxx			xxxx	xxxx			0.05	
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx			0.2	
Control Del:	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx			13.8	
LOS by Move:	*	*		*			*	*		*			*	*		*			*	*			B	
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx			xxxxx	
SharedQueue:	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx			xxxxx	
Shrd ConDel:	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx			xxxxx	
Shared LOS:	*	*		*			*	*		*			*	*		*			*	*			*	
ApproachDel:	xxxxxx						xxxxxx						xxxxxx						13.8					
ApproachLOS:	*						*						*						B					

Note: Queue reported is the number of cars per lane.

PM Cum Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #10 Goldenwest Street at Driveway No. 8

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[14.1]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	2	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	1
Volume Module:																				
Base Vol:	0	1864		36		0	1841		0		0	0		0		0	0		28	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Initial Bse:	0	1864		36		0	1841		0		0	0		0		0	0		28	
Added Vol:	0	0		0		0	0		0		0	0		0		0	0		0	
PasserByVol:	0	0		0		0	0		0		0	0		0		0	0		0	
Initial Fut:	0	1864		36		0	1841		0		0	0		0		0	0		28	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Volume:	0	1864		36		0	1841		0		0	0		0		0	0		28	
Reduct Vol:	0	0		0		0	0		0		0	0		0		0	0		0	
FinalVolume:	0	1864		36		0	1841		0		0	0		0		0	0		28	
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		6.9	
FollowUpTim:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		3.3	
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		639	
Potent Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		423	
Move Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		423	
Volume/Cap:	xxxx	xxxx		xxxx		xxxx	xxxx		xxxx		xxxx	xxxx		xxxx		xxxx	xxxx		0.07	
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		0.2	
Control Del:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		14.1	
LOS by Move:	*	*		*		*	*		*		*	*		*		*	*		B	
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx	
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
Shrd ConDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
Shared LOS:	*	*		*		*	*		*		*	*		*		*	*		*	
ApproachDel:	xxxxxx					xxxxxx					xxxxxx					14.1				
ApproachLOS:	*					*					*					B				

Note: Queue reported is the number of cars per lane.

AM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #11 Goldenwest Street at Driveway No. 7

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: B[12.1]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 2	1	0	0 0 3	0	0	0 0 0	0	0	0 0 0	0	1
Volume Module:												
Base Vol:	0	1453	52	0	1510	0	0	0	0	0	0	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1453	52	0	1510	0	0	0	0	0	0	10
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1453	52	0	1510	0	0	0	0	0	0	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1453	52	0	1510	0	0	0	0	0	0	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	1453	52	0	1510	0	0	0	0	0	0	10
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	510
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	514
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	514
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.02
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	0.1
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	12.1
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	B
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			12.1		
ApproachLOS:	*			*			*			B		

Note: Queue reported is the number of cars per lane.

AM Cum Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #11 Goldenwest Street at Driveway No. 7

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: B[12.3]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	2	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	1
Volume Module:																				
Base Vol:	0	1481			56	0	1516			0	0		0		0	0		0		12
Growth Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	0	1481			56	0	1516			0	0		0		0	0		0		12
Added Vol:	0	0			0	0	0			0	0		0		0	0		0		0
PasserByVol:	0	0			0	0	0			0	0		0		0	0		0		0
Initial Fut:	0	1481			56	0	1516			0	0		0		0	0		0		12
User Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00		1.00		1.00
PHF Volume:	0	1481			56	0	1516			0	0		0		0	0		0		12
Reduct Vol:	0	0			0	0	0			0	0		0		0	0		0		0
FinalVolume:	0	1481			56	0	1516			0	0		0		0	0		0		12
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx		xxxx		xxxxx	xxxxx		xxxx		6.9
FollowUpTim:	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx		xxxx		xxxxx	xxxxx		xxxx		3.3
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			522
Potent Cap.:	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			505
Move Cap.:	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			505
Volume/Cap:	xxxx	xxxx			xxxx	xxxx	xxxx			xxxx	xxxx	xxxx			xxxx	xxxx	xxxx			0.02
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			0.1
Control Del:	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx	xxxx			12.3
LOS by Move:	*	*			*	*	*			*	*	*			*	*	*			B
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx
SharedQueue:	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx
Shrd ConDel:	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx
Shared LOS:	*	*			*	*	*			*	*	*			*	*	*			*
ApproachDel:	xxxxxx					xxxxxx					xxxxxx					12.3				
ApproachLOS:	*					*					*					B				

Note: Queue reported is the number of cars per lane.

PM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #11 Goldenwest Street at Driveway No. 7

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[14.0]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 2	1	0	0 0 3	0	0	0 0 0	0	0	0 0 0	0	1
Volume Module:												
Base Vol:	0	1842	20	0	1823	0	0	0	0	0	0	32
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1842	20	0	1823	0	0	0	0	0	0	32
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1842	20	0	1823	0	0	0	0	0	0	32
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1842	20	0	1823	0	0	0	0	0	0	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	1842	20	0	1823	0	0	0	0	0	0	32
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	624
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	433
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	433
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.07
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	0.2
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	14.0
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	B
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			14.0		
ApproachLOS:	*			*			*			B		

Note: Queue reported is the number of cars per lane.

PM Cum Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #11 Goldenwest Street at Driveway No. 7

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[14.2]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	2	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	1
Volume Module:																				
Base Vol:	0	1862			23	0	1841			0	0		0		0	0		0		38
Growth Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	0	1862			23	0	1841			0	0		0		0	0		0		38
Added Vol:	0	0			0	0	0			0	0		0		0	0		0		0
PasserByVol:	0	0			0	0	0			0	0		0		0	0		0		0
Initial Fut:	0	1862			23	0	1841			0	0		0		0	0		0		38
User Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00		1.00		1.00
PHF Volume:	0	1862			23	0	1841			0	0		0		0	0		0		38
Reduct Vol:	0	0			0	0	0			0	0		0		0	0		0		0
FinalVolume:	0	1862			23	0	1841			0	0		0		0	0		0		38
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx	xxxx			6.9
FollowUpTim:	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx	xxxx			3.3
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			632
Potent Cap.:	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			428
Move Cap.:	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			428
Volume/Cap:	xxxx	xxxx			xxxx	xxxx	xxxx			xxxx	xxxx	xxxx			xxxx	xxxx	xxxx			0.09
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			0.3
Control Del:	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx	xxxx			14.2
LOS by Move:	*	*			*	*	*			*	*	*			*	*	*			B
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx	xxxx	xxxx			xxxxx
SharedQueue:	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx
Shrd ConDel:	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx	xxxxx	xxxx			xxxxx
Shared LOS:	*	*			*	*	*			*	*	*			*	*	*			*
ApproachDel:	xxxxxx					xxxxxx					xxxxxx					14.2				
ApproachLOS:	*					*					*					B				

Note: Queue reported is the number of cars per lane.

AM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Goldenwest Street at Edinger Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.743
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	2	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	109	1157	147	170	1225	114	140	1180	127	138	606	207
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	109	1157	147	170	1225	114	140	1180	127	138	606	207
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	109	1157	147	170	1225	114	140	1180	127	138	606	207
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	109	1157	147	170	1225	114	140	1180	127	138	606	207
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	109	1157	147	170	1225	114	140	1180	127	138	606	207
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	109	1157	147	170	1225	114	140	1180	127	138	606	207
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.66	0.34	1.00	2.74	0.26	1.00	2.71	0.29	1.00	2.24	0.76
Final Sat.:	1700	4525	575	1700	4666	434	1700	4604	496	1700	3801	1299
Capacity Analysis Module:												
Vol/Sat:	0.06	0.26	0.26	0.10	0.26	0.26	0.08	0.26	0.26	0.08	0.16	0.16
Crit Moves:		****		****				****		****		

AM Cum Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Goldenwest Street at Edinger Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.749
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	2	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	109	1163	151	174	1225	115	149	1184	127	140	608	224
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	109	1163	151	174	1225	115	149	1184	127	140	608	224
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	109	1163	151	174	1225	115	149	1184	127	140	608	224
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	109	1163	151	174	1225	115	149	1184	127	140	608	224
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	109	1163	151	174	1225	115	149	1184	127	140	608	224
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	109	1163	151	174	1225	115	149	1184	127	140	608	224
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.66	0.34	1.00	2.74	0.26	1.00	2.71	0.29	1.00	2.19	0.81
Final Sat.:	1700	4514	586	1700	4662	438	1700	4606	494	1700	3727	1373
Capacity Analysis Module:												
Vol/Sat:	0.06	0.26	0.26	0.10	0.26	0.26	0.09	0.26	0.26	0.08	0.16	0.16
Crit Moves:		****			****			****			****	

AM Cum Plus Project
2.13.3396.2 Goldenwest College
Mitigation

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Goldenwest Street at Edinger Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.749
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	43	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	2	1 0	1 0	2	1 0	1 0	3	0 1
Volume Module:												
Base Vol:	109	1163	151	174	1225	115	149	1184	127	140	608	224
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	109	1163	151	174	1225	115	149	1184	127	140	608	224
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	109	1163	151	174	1225	115	149	1184	127	140	608	224
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	109	1163	151	174	1225	115	149	1184	127	140	608	224
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	109	1163	151	174	1225	115	149	1184	127	140	608	224
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	109	1163	151	174	1225	115	149	1184	127	140	608	224
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.66	0.34	1.00	2.74	0.26	1.00	2.71	0.29	1.00	3.00	1.00
Final Sat.:	1700	4514	586	1700	4662	438	1700	4606	494	1700	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.06	0.26	0.26	0.10	0.26	0.26	0.09	0.26	0.26	0.08	0.12	0.13
Crit Moves:		****			****			****			****	

PM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Goldenwest Street at Edinger Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.905
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	89	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	2	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	161	1505	147	230	1433	161	154	1121	123	141	1351	204
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	161	1505	147	230	1433	161	154	1121	123	141	1351	204
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	161	1505	147	230	1433	161	154	1121	123	141	1351	204
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	161	1505	147	230	1433	161	154	1121	123	141	1351	204
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	161	1505	147	230	1433	161	154	1121	123	141	1351	204
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	161	1505	147	230	1433	161	154	1121	123	141	1351	204
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.73	0.27	1.00	2.70	0.30	1.00	2.70	0.30	1.00	2.61	0.39
Final Sat.:	1700	4646	454	1700	4585	515	1700	4596	504	1700	4431	669
Capacity Analysis Module:												
Vol/Sat:	0.09	0.32	0.32	0.14	0.31	0.31	0.09	0.24	0.24	0.08	0.30	0.30
Crit Moves:		****			****			****			****	

PM Cum Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Goldenwest Street at Edinger Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.923
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	102	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2	1 0	1 0	2	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	161	1509	150	244	1435	164	161	1128	123	147	1362	216
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	161	1509	150	244	1435	164	161	1128	123	147	1362	216
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	161	1509	150	244	1435	164	161	1128	123	147	1362	216
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	161	1509	150	244	1435	164	161	1128	123	147	1362	216
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	161	1509	150	244	1435	164	161	1128	123	147	1362	216
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	161	1509	150	244	1435	164	161	1128	123	147	1362	216
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.73	0.27	1.00	2.69	0.31	1.00	2.71	0.29	1.00	2.59	0.41
Final Sat.:	1700	4639	461	1700	4577	523	1700	4599	501	1700	4402	698
Capacity Analysis Module:												
Vol/Sat:	0.09	0.33	0.33	0.14	0.31	0.31	0.09	0.25	0.25	0.09	0.31	0.31
Crit Moves:		****			****			****			****	

PM Cum Plus Project
2.13.3396.2 Goldenwest College
Mitigation

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #12 Goldenwest Street at Edinger Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.881
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	77	Level Of Service:	D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	-	R	L	- T	-	R	L	- T	-	R	L	- T	-	R
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0		0	0	0		0	0	0		0	0	0		0
Y+R:	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0
Lanes:	1	0 2	1	0	1	0 2	1	0	1	0 2	1	0	1	0 3	0	1
Volume Module:																
Base Vol:	161	1509		150	244	1435		164	161	1128		123	147	1362		216
Growth Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	161	1509		150	244	1435		164	161	1128		123	147	1362		216
Added Vol:	0	0		0	0	0		0	0	0		0	0	0		0
PasserByVol:	0	0		0	0	0		0	0	0		0	0	0		0
Initial Fut:	161	1509		150	244	1435		164	161	1128		123	147	1362		216
User Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Volume:	161	1509		150	244	1435		164	161	1128		123	147	1362		216
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	161	1509		150	244	1435		164	161	1128		123	147	1362		216
PCE Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
FinalVolume:	161	1509		150	244	1435		164	161	1128		123	147	1362		216
Saturation Flow Module:																
Sat/Lane:	1700	1700		1700	1700	1700		1700	1700	1700		1700	1700	1700		1700
Adjustment:	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Lanes:	1.00	2.73		0.27	1.00	2.69		0.31	1.00	2.71		0.29	1.00	3.00		1.00
Final Sat.:	1700	4639		461	1700	4577		523	1700	4599		501	1700	5100		1700
Capacity Analysis Module:																
Vol/Sat:	0.09	0.33		0.33	0.14	0.31		0.31	0.09	0.25		0.25	0.09	0.27		0.13
Crit Moves:		****				****				****				****		

AM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Goldenwest Street at Heil Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.616
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	1	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	94	1182	93	116	1387	59	108	723	118	45	399	109
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	94	1182	93	116	1387	59	108	723	118	45	399	109
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	94	1182	93	116	1387	59	108	723	118	45	399	109
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	94	1182	93	116	1387	59	108	723	118	45	399	109
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	94	1182	93	116	1387	59	108	723	118	45	399	109
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	94	1182	93	116	1387	59	108	723	118	45	399	109
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	5100	1700	1700	5100	1700	1700	3400	1700	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.06	0.23	0.05	0.07	0.27	0.03	0.06	0.21	0.07	0.03	0.12	0.06
Crit Moves:	****				****			****		****		

AM Cum Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Goldenwest Street at Heil Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.617
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	1	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	94	1191	94	116	1389	59	108	723	118	45	399	109
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	94	1191	94	116	1389	59	108	723	118	45	399	109
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	94	1191	94	116	1389	59	108	723	118	45	399	109
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	94	1191	94	116	1389	59	108	723	118	45	399	109
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	94	1191	94	116	1389	59	108	723	118	45	399	109
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	94	1191	94	116	1389	59	108	723	118	45	399	109
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	5100	1700	1700	5100	1700	1700	3400	1700	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.06	0.23	0.06	0.07	0.27	0.03	0.06	0.21	0.07	0.03	0.12	0.06
Crit Moves:	****				****			****		****		

PM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Goldenwest Street at Heil Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.676
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	1	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	144	1514	137	114	1444	114	128	578	109	127	634	172
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	144	1514	137	114	1444	114	128	578	109	127	634	172
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	144	1514	137	114	1444	114	128	578	109	127	634	172
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	144	1514	137	114	1444	114	128	578	109	127	634	172
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	144	1514	137	114	1444	114	128	578	109	127	634	172
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	144	1514	137	114	1444	114	128	578	109	127	634	172
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	5100	1700	1700	5100	1700	1700	3400	1700	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.08	0.30	0.08	0.07	0.28	0.07	0.08	0.17	0.06	0.07	0.19	0.10
Crit Moves:		****		****			****				****	

PM Cum Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Goldenwest Street at Heil Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.677
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	3 0	1	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	144	1521	147	114	1452	114	128	578	109	135	634	172
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	144	1521	147	114	1452	114	128	578	109	135	634	172
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	144	1521	147	114	1452	114	128	578	109	135	634	172
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	144	1521	147	114	1452	114	128	578	109	135	634	172
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	144	1521	147	114	1452	114	128	578	109	135	634	172
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	144	1521	147	114	1452	114	128	578	109	135	634	172
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	5100	1700	1700	5100	1700	1700	3400	1700	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.08	0.30	0.09	0.07	0.28	0.07	0.08	0.17	0.06	0.08	0.19	0.10
Crit Moves:		****			****			****			****	

AM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Driveway No. 6 (Golden West College) at Edinger Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.383
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	19	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	0 1	1 0	0	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	7	0	4	16	1	13	44	1586	18	15	1011	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	7	0	4	16	1	13	44	1586	18	15	1011	70
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	7	0	4	16	1	13	44	1586	18	15	1011	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	7	0	4	16	1	13	44	1586	18	15	1011	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	7	0	4	16	1	13	44	1586	18	15	1011	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	7	0	4	16	1	13	44	1586	18	15	1011	70
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	1.00	0.07	0.93	1.00	2.97	0.03	1.00	2.81	0.19
Final Sat.:	1700	0	1700	1700	121	1579	1700	5043	57	1700	4770	330
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.01	0.01	0.01	0.03	0.31	0.31	0.01	0.21	0.21
Crit Moves:		****		****				****		****		

AM Cum Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Driveway No. 6 (Golden West College) at Edinger Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.387
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	20	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	0 1	1 0	0	1 0	1 0	2	1 0	1 0	2	1 0
Volume Module:												
Base Vol:	7	0	4	21	1	15	50	1592	18	15	1030	85
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	7	0	4	21	1	15	50	1592	18	15	1030	85
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	7	0	4	21	1	15	50	1592	18	15	1030	85
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	7	0	4	21	1	15	50	1592	18	15	1030	85
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	7	0	4	21	1	15	50	1592	18	15	1030	85
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	7	0	4	21	1	15	50	1592	18	15	1030	85
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	1.00	0.06	0.94	1.00	2.97	0.03	1.00	2.77	0.23
Final Sat.:	1700	0	1700	1700	106	1594	1700	5043	57	1700	4711	389
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.01	0.01	0.01	0.03	0.32	0.32	0.01	0.22	0.22
Crit Moves:		****		****				****		****		

PM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Driveway No. 6 (Golden West College) at Edinger Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.464
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	22	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0	1 0	1	0 0	1 0	1	0 2	1 0	1	0 2	1 0
Volume Module:												
Base Vol:	101	1	35	37	4	15	31	1393	67	84	1583	77
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	101	1	35	37	4	15	31	1393	67	84	1583	77
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	101	1	35	37	4	15	31	1393	67	84	1583	77
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	101	1	35	37	4	15	31	1393	67	84	1583	77
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	101	1	35	37	4	15	31	1393	67	84	1583	77
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	101	1	35	37	4	15	31	1393	67	84	1583	77
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.49	0.51	1.00	0.21	0.79	1.00	2.86	0.14	1.00	2.86	0.14
Final Sat.:	1700	831	869	1700	358	1342	1700	4866	234	1700	4863	237
Capacity Analysis Module:												
Vol/Sat:	0.06	0.00	0.04	0.02	0.01	0.01	0.02	0.29	0.29	0.05	0.33	0.33
Crit Moves:	****				****		****				****	

PM Cum Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #14 Driveway No. 6 (Golden West College) at Edinger Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.478
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxx
Optimal Cycle:	23	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	0 1	0	1	0 0	1 0	1	0 2	1 0	1	0 2	1 0
Volume Module:												
Base Vol:	101	1	35	54	4	23	35	1412	67	84	1604	88
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	101	1	35	54	4	23	35	1412	67	84	1604	88
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	101	1	35	54	4	23	35	1412	67	84	1604	88
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	101	1	35	54	4	23	35	1412	67	84	1604	88
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	101	1	35	54	4	23	35	1412	67	84	1604	88
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	101	1	35	54	4	23	35	1412	67	84	1604	88
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.49	0.51	1.00	0.15	0.85	1.00	2.86	0.14	1.00	2.84	0.16
Final Sat.:	1700	831	869	1700	252	1448	1700	4869	231	1700	4835	265
Capacity Analysis Module:												
Vol/Sat:	0.06	0.00	0.04	0.03	0.02	0.02	0.02	0.29	0.29	0.05	0.33	0.33
Crit Moves:	****				****		****				****	

AM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #15 Driveway No. 5 at Edinger Avenue

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: B[11.1]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0	0 0	0	0 0 0	0 1		0 0 3	0 0		0 0 2	1 0	
Volume Module:												
Base Vol:	0	0	0	0	0	5	0	1494	0	0	1120	74
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	5	0	1494	0	0	1120	74
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	0	5	0	1494	0	0	1120	74
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	5	0	1494	0	0	1120	74
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	5	0	1494	0	0	1120	74
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	410	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	596	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	596	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	0.0	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	11.1	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	B	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			11.1			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

Note: Queue reported is the number of cars per lane.

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2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #15 Driveway No. 5 at Edinger Avenue

****

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: B[11.2]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0	0 0	0	0 0 0	0 1		0 0 3	0 0		0 0 2	1 0	
Volume Module:												
Base Vol:	0	0	0	0	0	6	0	1505	0	0	1152	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	6	0	1505	0	0	1152	80
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	0	6	0	1505	0	0	1152	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	6	0	1505	0	0	1152	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	6	0	1505	0	0	1152	80
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	424	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	584	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	584	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	0.0	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	11.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	B	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			11.2			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

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Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #15 Driveway No. 5 at Edinger Avenue

****

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[13.4]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			0 0 0 0 1			0 0 3 0 0			0 0 2 1 0		
Volume Module:												
Base Vol:	0	0	0	0	0	28	0	1535	0	0	1743	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	28	0	1535	0	0	1743	20
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	0	28	0	1535	0	0	1743	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	28	0	1535	0	0	1743	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	28	0	1535	0	0	1743	20
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	591	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	455	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	455	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	0.06	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	0.2	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	13.4	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	B	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			13.4			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

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Note: Queue reported is the number of cars per lane.

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2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #15 Driveway No. 5 at Edinger Avenue

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[13.7]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			0 0 0 0 1			0 0 3 0 0			0 0 2 1 0		
Volume Module:												
Base Vol:	0	0	0	0	0	33	0	1571	0	0	1770	24
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	33	0	1571	0	0	1770	24
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	0	33	0	1571	0	0	1770	24
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	33	0	1571	0	0	1770	24
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	33	0	1571	0	0	1770	24
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	602	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	448	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	448	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	0.07	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	0.2	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	13.7	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	B	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			13.7			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #16 Driveway No. 4 at Edinger Avenue

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: F[78.2]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	0	1		0	0	1!	0	0		1	0	2	1	0		1	0	2	1	0	
Volume Module:																								
Base Vol:	0	0	6				7	0	1				46	1520	7				6	1108	84			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	0	0	6				7	0	1				46	1520	7				6	1108	84			
Added Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	0	0	6				7	0	1				46	1520	7				6	1108	84			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Volume:	0	0	6				7	0	1				46	1520	7				6	1108	84			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
FinalVolume:	0	0	6				7	0	1				46	1520	7				6	1108	84			
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	6.9				7.5	6.5	6.9				4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	xxxxx	xxxx	3.3				3.5	4.0	3.3				2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	510				1761	2781	411				1192	xxxx	xxxxx				1527	xxxx	xxxxx			
Potent Cap.:	xxxx	xxxx	514				55	19	595				593	xxxx	xxxxx				442	xxxx	xxxxx			
Move Cap.:	xxxx	xxxx	514				50	17	595				593	xxxx	xxxxx				442	xxxx	xxxxx			
Volume/Cap:	xxxx	xxxx	0.01				0.14	0.00	0.00				0.08	xxxx	xxxx				0.01	xxxx	xxxx			
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	0.0				xxxx	xxxx	xxxxx				0.3	xxxx	xxxxx				0.0	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	12.1				xxxxx	xxxx	xxxxx				11.6	xxxx	xxxxx				13.3	xxxx	xxxxx			
LOS by Move:	*	*	B				*	*	*				B	*	*				B	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx				xxxx	57	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx				xxxxx	0.5	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx	xxxx	xxxxx				xxxxx	78.2	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	*				*	F	*				*	*	*				*	*	*			
ApproachDel:	12.1						78.2						xxxxxx						xxxxxx					
ApproachLOS:	B						F						*						*					

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #16 Driveway No. 4 at Edinger Avenue

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: F[92.5]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 1			0 0 1! 0 0			1 0 2 1 0			1 0 2 1 0		
Volume Module:												
Base Vol:	0	0	6	9	0	1	48	1530	7	6	1145	93
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	6	9	0	1	48	1530	7	6	1145	93
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	6	9	0	1	48	1530	7	6	1145	93
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	6	9	0	1	48	1530	7	6	1145	93
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	6	9	0	1	48	1530	7	6	1145	93
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	514	1810	2837	428	1238	xxxx	xxxxx	1537	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	511	50	18	581	570	xxxx	xxxxx	438	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	511	46	16	581	570	xxxx	xxxxx	438	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.01	0.20	0.00	0.00	0.08	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	0.0	xxxx	xxxx	xxxxx	0.3	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	12.1	xxxxx	xxxx	xxxxx	11.9	xxxx	xxxxx	13.3	xxxx	xxxxx
LOS by Move:	*	*	B	*	*	*	B	*	*	B	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	51	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.7	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	92.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	F	*	*	*	*	*	*	*
ApproachDel:	12.1			92.5			xxxxxx			xxxxxx		
ApproachLOS:	B			F			*			*		

Note: Queue reported is the number of cars per lane.

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Mitigation

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #16 Driveway No. 4 at Edinger Avenue

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B[13.3]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 1			0 0 0 0 1			1 0 2 1 0			1 0 2 1 0		
Volume Module:												
Base Vol:	0	0	6	0	0	10	48	1530	7	6	1145	93
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	6	0	0	10	48	1530	7	6	1145	93
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	6	0	0	10	48	1530	7	6	1145	93
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	6	0	0	10	48	1530	7	6	1145	93
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	6	0	0	10	48	1530	7	6	1145	93
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.9	xxxxx	xxxx	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	514	xxxx	xxxx	428	1238	xxxx	xxxxx	1537	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	511	xxxx	xxxx	581	570	xxxx	xxxxx	438	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	511	xxxx	xxxx	581	570	xxxx	xxxxx	438	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.01	xxxx	xxxx	0.02	0.08	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	0.0	xxxx	xxxx	0.1	0.3	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	12.1	xxxxx	xxxx	11.3	11.9	xxxx	xxxxx	13.3	xxxx	xxxxx
LOS by Move:	*	*	B	*	*	B	B	*	*	B	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:		12.1			11.3			xxxxxx			xxxxxx	
ApproachLOS:		B			B			*			*	

Note: Queue reported is the number of cars per lane.

PM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #16 Driveway No. 4 at Edinger Avenue

Average Delay (sec/veh): 9.1 Worst Case Level Of Service: F[763.9]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 1			0 0 1! 0 0			1 0 2 1 0			1 0 2 1 0		
Volume Module:												
Base Vol:	0	0	6	34	0	6	11	1467	8	6	1795	55
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	6	34	0	6	11	1467	8	6	1795	55
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	6	34	0	6	11	1467	8	6	1795	55
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	6	34	0	6	11	1467	8	6	1795	55
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	6	34	0	6	11	1467	8	6	1795	55
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	493	2346	3332	626	1850	xxxx	xxxxx	1475	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	527	20	8	432	332	xxxx	xxxxx	463	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	527	19	8	432	332	xxxx	xxxxx	463	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.01	1.81	0.00	0.01	0.03	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	0.0	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	11.9	xxxxx	xxxx	xxxxx	16.2	xxxx	xxxxx	12.9	xxxx	xxxxx
LOS by Move:	*	*	B	*	*	*	C	*	*	B	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	22	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	5.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	764	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	F	*	*	*	*	*	*	*
ApproachDel:		11.9			763.9			xxxxxx			xxxxxx	
ApproachLOS:		B			F			*			*	

Note: Queue reported is the number of cars per lane.

PM Cum Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #16 Driveway No. 4 at Edinger Avenue

Average Delay (sec/veh): 15.3 Worst Case Level Of Service: F[1056.3]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 1			0 0 1! 0 0			1 0 2 1 0			1 0 2 1 0		
Volume Module:												
Base Vol:	0	0	6	42	0	8	12	1502	8	6	1824	62
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	6	42	0	8	12	1502	8	6	1824	62
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	6	42	0	8	12	1502	8	6	1824	62
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	6	42	0	8	12	1502	8	6	1824	62
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	6	42	0	8	12	1502	8	6	1824	62
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	505	2392	3401	639	1886	xxxx	xxxxx	1510	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	518	18	7	424	322	xxxx	xxxxx	449	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	518	17	7	424	322	xxxx	xxxxx	449	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.01	2.43	0.00	0.02	0.04	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	0.0	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	12.0	xxxxx	xxxx	xxxxx	16.6	xxxx	xxxxx	13.1	xxxx	xxxxx
LOS by Move:	*	*	B	*	*	*	C	*	*	B	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	20	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	6.6	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	1056	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	F	*	*	*	*	*	*	*
ApproachDel:		12.0			1056.3			xxxxxx			xxxxxx	
ApproachLOS:		B			F			*			*	

Note: Queue reported is the number of cars per lane.

PM Cum Plus Project
2.13.3396.2 Goldenwest College
Mitigation

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

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Intersection #16 Driveway No. 4 at Edinger Avenue

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Average Delay (sec/veh): 0.3 Worst Case Level Of Service: C[16.6]

****

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	0	1	0	0	0	0	1	1	0	2	1	0	1	0	2	1	0
Volume Module:																				
Base Vol:	0	0	6			0	0	50			12	1502	8			6	1824	62		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	0	0	6			0	0	50			12	1502	8			6	1824	62		
Added Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	0	0	6			0	0	50			12	1502	8			6	1824	62		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Volume:	0	0	6			0	0	50			12	1502	8			6	1824	62		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
FinalVolume:	0	0	6			0	0	50			12	1502	8			6	1824	62		
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	6.9			xxxxx	xxxx	6.9			4.1	xxxx	xxxxx			4.1	xxxx	xxxxx		
FollowUpTim:	xxxxx	xxxx	3.3			xxxxx	xxxx	3.3			2.2	xxxx	xxxxx			2.2	xxxx	xxxxx		
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	505			xxxx	xxxx	639			1886	xxxx	xxxxx			1510	xxxx	xxxxx		
Potent Cap.:	xxxx	xxxx	518			xxxx	xxxx	424			322	xxxx	xxxxx			449	xxxx	xxxxx		
Move Cap.:	xxxx	xxxx	518			xxxx	xxxx	424			322	xxxx	xxxxx			449	xxxx	xxxxx		
Volume/Cap:	xxxx	xxxx	0.01			xxxx	xxxx	0.12			0.04	xxxx	xxxx			0.01	xxxx	xxxx		
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	0.0			xxxx	xxxx	0.4			0.1	xxxx	xxxxx			0.0	xxxx	xxxxx		
Control Del:	xxxxx	xxxx	12.0			xxxxx	xxxx	14.6			16.6	xxxx	xxxxx			13.1	xxxx	xxxxx		
LOS by Move:	*	*	B			*	*	B			C	*	*			B	*	*		
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*	*	*			*	*	*			*	*	*			*	*	*		
ApproachDel:	12.0					14.6					xxxxxx					xxxxxx				
ApproachLOS:	B					B					*					*				

****

Note: Queue reported is the number of cars per lane.

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AM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Vermont Street/Gothard Street at McFadden Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.651
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	0	0 1	0	0	1! 0 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	210	0	199	68	0	5	7	510	340	325	624	32
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	210	0	199	68	0	5	7	510	340	325	624	32
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	210	0	199	68	0	5	7	510	340	325	624	32
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	210	0	199	68	0	5	7	510	340	325	624	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	210	0	199	68	0	5	7	510	340	325	624	32
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	210	0	199	68	0	5	7	510	340	325	624	32
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.93	0.00	0.07	1.00	1.20	0.80	1.00	1.90	0.10
Final Sat.:	3400	0	1700	1584	0	116	1700	2040	1360	1700	3234	166
Capacity Analysis Module:												
Vol/Sat:	0.06	0.00	0.12	0.04	0.00	0.04	0.00	0.25	0.25	0.19	0.19	0.19
Crit Moves:			****	****				****		****		

AM Cum Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Vermont Street/Gothard Street at McFadden Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.671
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	0	1	0	0	1! 0	0	1 0	1	1	0	1 0	1	1	0
Volume Module:												
Base Vol:	213	0	205	68	0	5	7	512	350	346	633	32
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	213	0	205	68	0	5	7	512	350	346	633	32
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	213	0	205	68	0	5	7	512	350	346	633	32
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	213	0	205	68	0	5	7	512	350	346	633	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	213	0	205	68	0	5	7	512	350	346	633	32
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	213	0	205	68	0	5	7	512	350	346	633	32
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.93	0.00	0.07	1.00	1.19	0.81	1.00	1.90	0.10
Final Sat.:	3400	0	1700	1584	0	116	1700	2019	1381	1700	3236	164
Capacity Analysis Module:												
Vol/Sat:	0.06	0.00	0.12	0.04	0.00	0.04	0.00	0.25	0.25	0.20	0.20	0.20
Crit Moves:			****	****				****		****		

AM Cum Plus Project
2.13.3396.2 Goldenwest College
Mitigation

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Vermont Street/Gothard Street at McFadden Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.613
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	0	0 1	0	0	1! 0	0	1 0	1 1 0	1	0	1 1 0
Volume Module:												
Base Vol:	213	0	205	68	0	5	7	512	350	346	633	32
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	213	0	205	68	0	5	7	512	350	346	633	32
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	213	0	205	68	0	5	7	512	350	346	633	32
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	213	0	205	68	0	5	7	512	350	346	633	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	213	0	205	68	0	5	7	512	350	346	633	32
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	213	0	205	68	0	5	7	512	350	346	633	32
OvlAdjVol:			0									
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.93	0.00	0.07	1.00	1.19	0.81	1.00	1.90	0.10
Final Sat.:	3400	0	1700	1584	0	116	1700	2019	1381	1700	3236	164
Capacity Analysis Module:												
Vol/Sat:	0.06	0.00	0.12	0.04	0.00	0.04	0.00	0.25	0.25	0.20	0.20	0.20
OvlAdjV/S:			0.00									
Crit Moves:	****			****				****		****		

PM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Vermont Street/Gothard Street at McFadden Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.851
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	65	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	0 0	1	0 0	1! 0	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	586	0	492	51	0	2	2	658	476	250	730	68
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	586	0	492	51	0	2	2	658	476	250	730	68
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	586	0	492	51	0	2	2	658	476	250	730	68
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	586	0	492	51	0	2	2	658	476	250	730	68
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	586	0	492	51	0	2	2	658	476	250	730	68
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	586	0	492	51	0	2	2	658	476	250	730	68
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.96	0.00	0.04	1.00	1.16	0.84	1.00	1.83	0.17
Final Sat.:	3400	0	1700	1636	0	64	1700	1973	1427	1700	3110	290
Capacity Analysis Module:												
Vol/Sat:	0.17	0.00	0.29	0.03	0.00	0.03	0.00	0.33	0.33	0.15	0.23	0.23
Crit Moves:			****			****		****		****		

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2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Vermont Street/Gothard Street at McFadden Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.904
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	89	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	0	0 1	0	0	1! 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	619	0	524	51	0	2	2	666	515	284	737	68
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	619	0	524	51	0	2	2	666	515	284	737	68
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	619	0	524	51	0	2	2	666	515	284	737	68
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	619	0	524	51	0	2	2	666	515	284	737	68
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	619	0	524	51	0	2	2	666	515	284	737	68
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	619	0	524	51	0	2	2	666	515	284	737	68
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.96	0.00	0.04	1.00	1.13	0.87	1.00	1.83	0.17
Final Sat.:	3400	0	1700	1636	0	64	1700	1917	1483	1700	3113	287
Capacity Analysis Module:												
Vol/Sat:	0.18	0.00	0.31	0.03	0.00	0.03	0.00	0.35	0.35	0.17	0.24	0.24
Crit Moves:			****			****		****		****		

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2.13.3396.2 Goldenwest College
Mitigation

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #17 Vermont Street/Gothard Street at McFadden Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.778
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:		Ovl			Include			Include			Include	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	0	0 1	0	0	1! 0 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	619	0	524	51	0	2	2	666	515	284	737	68
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	619	0	524	51	0	2	2	666	515	284	737	68
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	619	0	524	51	0	2	2	666	515	284	737	68
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	619	0	524	51	0	2	2	666	515	284	737	68
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	619	0	524	51	0	2	2	666	515	284	737	68
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	619	0	524	51	0	2	2	666	515	284	737	68
OvlAdjVol:			240									
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.96	0.00	0.04	1.00	1.13	0.87	1.00	1.83	0.17
Final Sat.:	3400	0	1700	1636	0	64	1700	1917	1483	1700	3113	287
Capacity Analysis Module:												
Vol/Sat:	0.18	0.00	0.31	0.03	0.00	0.03	0.00	0.35	0.35	0.17	0.24	0.24
OvlAdjV/S:			0.14									
Crit Moves:	****					****		****			****	

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #18 Gothard Street at Driveway No. 1

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: B[12.2]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	1	0	2	0	0		0	0	1	1	0		1	0	0	0	1		0	0	0	0	0	
Volume Module:																								
Base Vol:	29	479		0			0	533		189			28		0		35		0		0		0	
Growth Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	29	479		0			0	533		189			28		0		35		0		0		0	
Added Vol:	0	0		0			0	0		0			0		0		0		0		0		0	
PasserByVol:	0	0		0			0	0		0			0		0		0		0		0		0	
Initial Fut:	29	479		0			0	533		189			28		0		35		0		0		0	
User Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
PHF Volume:	29	479		0			0	533		189			28		0		35		0		0		0	
Reduct Vol:	0	0		0			0	0		0			0		0		0		0		0		0	
FinalVolume:	29	479		0			0	533		189			28		0		35		0		0		0	
Critical Gap Module:																								
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx							6.8	xxxx		6.9	xxxxx	xxxx	xxxxx					
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx							3.5	xxxx		3.3	xxxxx	xxxx	xxxxx					
Capacity Module:																								
Cnflict Vol:	722	xxxx	xxxxx	xxxx	xxxx	xxxxx							925	xxxx		361	xxxx	xxxx	xxxxx					
Potent Cap.:	889	xxxx	xxxxx	xxxx	xxxx	xxxxx							272	xxxx		641	xxxx	xxxx	xxxxx					
Move Cap.:	889	xxxx	xxxxx	xxxx	xxxx	xxxxx							265	xxxx		641	xxxx	xxxx	xxxxx					
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx							440		372	xxxxx		422		334	xxxxx			
Volume/Cap:	0.03	xxxx	xxxx	xxxx	xxxx	xxxx							0.06	xxxx		0.05	xxxx	xxxx	xxxx					
Level Of Service Module:																								
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx							0.2	xxxx		0.2	xxxx	xxxx	xxxxx					
Control Del:	9.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx							13.7	xxxx		10.9	xxxxx	xxxx	xxxxx					
LOS by Move:	A	*	*	*	*	*							B	*		B	*	*	*					
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx							xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*							*	*	*			*	*	*				
ApproachDel:	xxxxxx			xxxxxx									12.2					xxxxxx						
ApproachLOS:	*			*									B					*						

Note: Queue reported is the number of cars per lane.

AM Cum Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #18 Gothard Street at Driveway No. 1

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: B[12.6]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	1	0	2	0	0		0	0	1	1	0		1	0	0	0	1		0	0	0	0	0	
Volume Module:																								
Base Vol:	36	481		0			0	542		211			34		0		37		0		0		0	
Growth Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	36	481		0			0	542		211			34		0		37		0		0		0	
Added Vol:	0	0		0			0	0		0			0		0		0		0		0		0	
PasserByVol:	0	0		0			0	0		0			0		0		0		0		0		0	
Initial Fut:	36	481		0			0	542		211			34		0		37		0		0		0	
User Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
PHF Volume:	36	481		0			0	542		211			34		0		37		0		0		0	
Reduct Vol:	0	0		0			0	0		0			0		0		0		0		0		0	
FinalVolume:	36	481		0			0	542		211			34		0		37		0		0		0	
Critical Gap Module:																								
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx							6.8	xxxx		6.9	xxxxx	xxxx	xxxxx					
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx							3.5	xxxx		3.3	xxxxx	xxxx	xxxxx					
Capacity Module:																								
Cnflict Vol:	753	xxxx	xxxxx	xxxx	xxxx	xxxxx							960	xxxx		377	xxxx	xxxx	xxxxx					
Potent Cap.:	866	xxxx	xxxxx	xxxx	xxxx	xxxxx							258	xxxx		627	xxxx	xxxx	xxxxx					
Move Cap.:	866	xxxx	xxxxx	xxxx	xxxx	xxxxx							250	xxxx		627	xxxx	xxxx	xxxxx					
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx							427	361	xxxxx	409	318	xxxxx						
Volume/Cap:	0.04	xxxx	xxxx	xxxx	xxxx	xxxx							0.08	xxxx	0.06	xxxx	xxxx	xxxx						
Level Of Service Module:																								
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx							0.3	xxxx		0.2	xxxx	xxxx	xxxxx					
Control Del:	9.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx							14.1	xxxx		11.1	xxxxx	xxxx	xxxxx					
LOS by Move:	A	*		*	*	*							B	*		B	*	*	*					
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx							xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Shared LOS:	*	*		*	*	*							*	*		*	*	*						
ApproachDel:	xxxxxx			xxxxxx									12.6			xxxxxx								
ApproachLOS:	*			*									B			*								

Note: Queue reported is the number of cars per lane.

PM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #18 Gothard Street at Driveway No. 1

Average Delay (sec/veh): 1.6 Worst Case Level Of Service: B[14.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 2	0 0		0 0 1	1 0		1 0 0	0 1		0 0 0	0 0	
Volume Module:												
Base Vol:	13	973	0	0	581	59	110	0	82	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	13	973	0	0	581	59	110	0	82	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	13	973	0	0	581	59	110	0	82	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	13	973	0	0	581	59	110	0	82	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	13	973	0	0	581	59	110	0	82	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	xxxx	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	640	xxxx	xxxxx	xxxx	xxxx	xxxxx	1123	xxxx	320	xxxx	xxxx	xxxxx
Potent Cap.:	954	xxxx	xxxxx	xxxx	xxxx	xxxxx	203	xxxx	682	xxxx	xxxx	xxxxx
Move Cap.:	954	xxxx	xxxxx	xxxx	xxxx	xxxxx	201	xxxx	682	xxxx	xxxx	xxxxx
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	401	269	xxxxx	238	264	xxxxx
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.27	xxxx	0.12	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	1.1	xxxx	0.4	xxxx	xxxx	xxxxx
Control Del:	8.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	17.3	xxxx	11.0	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	C	*	B	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			14.6			xxxxxx		
ApproachLOS:	*			*			B			*		

Note: Queue reported is the number of cars per lane.

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2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #18 Gothard Street at Driveway No. 1

****

Average Delay (sec/veh): 2.4 Worst Case Level Of Service: C[17.5]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 2	0	0	0 0 1	1	0	1 0 0	0	1	0 0 0	0	0
Volume Module:												
Base Vol:	44 1001		0	0 613		100	148	0	108	0 0		0
Growth Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
Initial Bse:	44 1001		0	0 613		100	148	0	108	0 0		0
Added Vol:	0 0		0	0 0		0	0	0	0	0 0		0
PasserByVol:	0 0		0	0 0		0	0	0	0	0 0		0
Initial Fut:	44 1001		0	0 613		100	148	0	108	0 0		0
User Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
PHF Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
PHF Volume:	44 1001		0	0 613		100	148	0	108	0 0		0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0 0		0
FinalVolume:	44 1001		0	0 613		100	148	0	108	0 0		0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx xxxxx			6.8 xxxx		6.9	xxxxx xxxx		xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx xxxxx			3.5 xxxx		3.3	xxxxx xxxx		xxxxx
Capacity Module:												
Cnflict Vol:	713 xxxx	xxxxx	xxxx	xxxx xxxxx			1252 xxxx		357	xxxx xxxx		xxxxx
Potent Cap.:	896 xxxx	xxxxx	xxxx	xxxx xxxxx			167 xxxx		646	xxxx xxxx		xxxxx
Move Cap.:	896 xxxx	xxxxx	xxxx	xxxx xxxxx			161 xxxx		646	xxxx xxxx		xxxxx
Total Cap:	xxxx xxxx	xxxxx	xxxx	xxxx xxxxx			360	237 xxxxx	201	227 xxxxx		
Volume/Cap:	0.05 xxxx	xxxx	xxxx	xxxx xxxx		xxxx	0.41 xxxx		0.17	xxxx xxxx		xxxx
Level Of Service Module:												
2Way95thQ:	0.2 xxxx	xxxxx	xxxx	xxxx xxxxx			2.0 xxxx		0.6	xxxx xxxx		xxxxx
Control Del:	9.2 xxxx	xxxxx	xxxxx	xxxx xxxxx			21.8 xxxx		11.7	xxxxx xxxx		xxxxx
LOS by Move:	A	*	*	*	*	*	C	*	B	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx xxxxx			xxxx xxxx	xxxxx	xxxx	xxxx xxxxx		
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxxx xxxx	xxxxx	xxxxx	xxxxx xxxx	xxxxx	xxxxx	xxxxx xxxx	xxxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxxx xxxx	xxxxx	xxxxx	xxxxx xxxx	xxxxx	xxxxx	xxxxx xxxx	xxxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			17.5			xxxxxx		
ApproachLOS:	*			*			C			*		

****

Note: Queue reported is the number of cars per lane.

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AM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #19 Gothard Street at Driveway No. 2/Center Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.434
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	21	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	0	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	65	389	193	159	372	56	20	10	13	179	66	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	65	389	193	159	372	56	20	10	13	179	66	120
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	65	389	193	159	372	56	20	10	13	179	66	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	65	389	193	159	372	56	20	10	13	179	66	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	65	389	193	159	372	56	20	10	13	179	66	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	65	389	193	159	372	56	20	10	13	179	66	120
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.34	0.66	1.00	1.74	0.26	1.00	0.43	0.57	1.00	1.00	1.00
Final Sat.:	1700	2273	1127	1700	2955	445	1700	739	961	1700	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.17	0.17	0.09	0.13	0.13	0.01	0.01	0.01	0.11	0.04	0.07
Crit Moves:		****		****				****		****		

AM Cum Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #19 Gothard Street at Driveway No. 2/Center Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.442
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxx
Optimal Cycle:	21	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	0	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	73	396	193	159	376	63	22	18	16	179	96	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	73	396	193	159	376	63	22	18	16	179	96	120
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	73	396	193	159	376	63	22	18	16	179	96	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	73	396	193	159	376	63	22	18	16	179	96	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	73	396	193	159	376	63	22	18	16	179	96	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	73	396	193	159	376	63	22	18	16	179	96	120
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.34	0.66	1.00	1.71	0.29	1.00	0.53	0.47	1.00	1.00	1.00
Final Sat.:	1700	2286	1114	1700	2912	488	1700	900	800	1700	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.04	0.17	0.17	0.09	0.13	0.13	0.01	0.02	0.02	0.11	0.06	0.07
Crit Moves:		****			****			****			****	

AM Cum Plus Project
2.13.3396.2 Goldenwest College
Mitigation

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #19 Gothard Street at Driveway No. 2/Center Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.457
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	22	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	0	1 0	2 0	0	1 0
Volume Module:												
Base Vol:	73	396	193	159	376	63	22	18	16	179	96	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	73	396	193	159	376	63	22	18	16	179	96	120
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	73	396	193	159	376	63	22	18	16	179	96	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	73	396	193	159	376	63	22	18	16	179	96	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	73	396	193	159	376	63	22	18	16	179	96	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	73	396	193	159	376	63	22	18	16	179	96	120
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.34	0.66	1.00	1.71	0.29	1.00	0.53	0.47	2.00	0.44	0.56
Final Sat.:	1700	2286	1114	1700	2912	488	1700	900	800	3400	756	944
Capacity Analysis Module:												
Vol/Sat:	0.04	0.17	0.17	0.09	0.13	0.13	0.01	0.02	0.02	0.05	0.13	0.13
Crit Moves:		****		****			****				****	

PM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #19 Gothard Street at Driveway No. 2/Center Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.878
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	76	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	0	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	12	616	376	233	397	9	34	61	44	574	52	364
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	12	616	376	233	397	9	34	61	44	574	52	364
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	616	376	233	397	9	34	61	44	574	52	364
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	12	616	376	233	397	9	34	61	44	574	52	364
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	616	376	233	397	9	34	61	44	574	52	364
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	12	616	376	233	397	9	34	61	44	574	52	364
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.24	0.76	1.00	1.96	0.04	1.00	0.58	0.42	1.00	1.00	1.00
Final Sat.:	1700	2111	1289	1700	3325	75	1700	988	712	1700	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.01	0.29	0.29	0.14	0.12	0.12	0.02	0.06	0.06	0.34	0.03	0.21
Crit Moves:		****		****				****		****		

PM Cum Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #19 Gothard Street at Driveway No. 2/Center Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.929
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	108	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	0	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	50	648	376	233	424	40	60	101	75	574	93	364
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	648	376	233	424	40	60	101	75	574	93	364
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	50	648	376	233	424	40	60	101	75	574	93	364
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	648	376	233	424	40	60	101	75	574	93	364
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	648	376	233	424	40	60	101	75	574	93	364
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	648	376	233	424	40	60	101	75	574	93	364
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.27	0.73	1.00	1.83	0.17	1.00	0.57	0.43	1.00	1.00	1.00
Final Sat.:	1700	2152	1248	1700	3107	293	1700	976	724	1700	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.03	0.30	0.30	0.14	0.14	0.14	0.04	0.10	0.10	0.34	0.05	0.21
Crit Moves:		****		****				****		****		

PM Cum Plus Project
2.13.3396.2 Goldenwest College
Mitigation

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #19 Gothard Street at Driveway No. 2/Center Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.792
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	0	1 0	2 0	0	1 0
Volume Module:												
Base Vol:	50	648	376	233	424	40	60	101	75	574	93	364
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	648	376	233	424	40	60	101	75	574	93	364
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	50	648	376	233	424	40	60	101	75	574	93	364
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	648	376	233	424	40	60	101	75	574	93	364
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	648	376	233	424	40	60	101	75	574	93	364
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	648	376	233	424	40	60	101	75	574	93	364
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.27	0.73	1.00	1.83	0.17	1.00	0.57	0.43	2.00	0.20	0.80
Final Sat.:	1700	2152	1248	1700	3107	293	1700	976	724	3400	346	1354
Capacity Analysis Module:												
Vol/Sat:	0.03	0.30	0.30	0.14	0.14	0.14	0.04	0.10	0.10	0.17	0.27	0.27
Crit Moves:		****		****			****				****	

AM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #20 Gothard Street at Driveway No. 3

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B[13.7]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 2	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	23	608	0	0	602	11	6	0	11	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	23	608	0	0	602	11	6	0	11	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	23	608	0	0	602	11	6	0	11	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	23	608	0	0	602	11	6	0	11	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	23	608	0	0	602	11	6	0	11	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	613	xxxx	xxxxx	xxxx	xxxx	xxxxx	958	1262	307	xxxx	xxxx	xxxxx
Potent Cap.:	976	xxxx	xxxxx	xxxx	xxxx	xxxxx	259	172	695	xxxx	xxxx	xxxxx
Move Cap.:	976	xxxx	xxxxx	xxxx	xxxx	xxxxx	254	168	695	xxxx	xxxx	xxxxx
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	0.02	0.00	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	431	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	13.7	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			13.7			xxxxxx		
ApproachLOS:	*			*			B			*		

Note: Queue reported is the number of cars per lane.

AM Cum Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #20 Gothard Street at Driveway No. 3

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: B[13.9]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 2	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	25	622	0	0	607	13	6	0	11	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	25	622	0	0	607	13	6	0	11	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	25	622	0	0	607	13	6	0	11	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	25	622	0	0	607	13	6	0	11	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	25	622	0	0	607	13	6	0	11	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	620	xxxx	xxxxx	xxxx	xxxx	xxxxx	975	1286	310	xxxx	xxxx	xxxxx
Potent Cap.:	970	xxxx	xxxxx	xxxx	xxxx	xxxxx	253	166	692	xxxx	xxxx	xxxxx
Move Cap.:	970	xxxx	xxxxx	xxxx	xxxx	xxxxx	248	162	692	xxxx	xxxx	xxxxx
Volume/Cap:	0.03	xxxx	xxxx	xxxx	xxxx	xxxx	0.02	0.00	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	424	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	13.9	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			13.9			xxxxxx		
ApproachLOS:	*			*			B			*		

Note: Queue reported is the number of cars per lane.

PM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #20 Gothard Street at Driveway No. 3

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[14.5]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	1	0	2	0	0		0	0	1	1	0		0	0	1!	0	0		0	0	0	0	0	
Volume Module:																								
Base Vol:	9	1037		0			0	1043		0			1	0		13			0	0		0		
Growth Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
Initial Bse:	9	1037		0			0	1043		0			1	0		13			0	0		0		
Added Vol:	0	0		0			0	0		0			0	0		0			0	0		0		
PasserByVol:	0	0		0			0	0		0			0	0		0			0	0		0		
Initial Fut:	9	1037		0			0	1043		0			1	0		13			0	0		0		
User Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
PHF Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		1.00		
PHF Volume:	9	1037		0			0	1043		0			1	0		13			0	0		0		
Reduct Vol:	0	0		0			0	0		0			0	0		0			0	0		0		
FinalVolume:	9	1037		0			0	1043		0			1	0		13			0	0		0		
Critical Gap Module:																								
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx							6.8	6.5		6.9	xxxxx	xxxx	xxxxx					
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx							3.5	4.0		3.3	xxxxx	xxxx	xxxxx					
Capacity Module:																								
Cnflict Vol:	1043	xxxx	xxxxx	xxxx	xxxx	xxxxx							1580	2098		522	xxxx	xxxx	xxxxx					
Potent Cap.:	675	xxxx	xxxxx	xxxx	xxxx	xxxxx							102	53		505	xxxx	xxxx	xxxxx					
Move Cap.:	675	xxxx	xxxxx	xxxx	xxxx	xxxxx							101	52		505	xxxx	xxxx	xxxxx					
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx							0.01	0.00		0.03	xxxx	xxxx	xxxx					
Level Of Service Module:																								
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx							xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx					
Control Del:	10.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx							xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx					
LOS by Move:	B	*		*	*	*							*	*		*	*	*	*					
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx							xxxx	393	xxxxx		xxxx	xxxx	xxxxx					
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							xxxxx	0.1	xxxxx		xxxxx	xxxx	xxxxx					
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							xxxxx	14.5	xxxxx		xxxxx	xxxx	xxxxx					
Shared LOS:	*	*		*	*	*							*	B		*	*	*	*					
ApproachDel:	xxxxxx			xxxxxx									14.5				xxxxxx							
ApproachLOS:	*			*									B				*							

Note: Queue reported is the number of cars per lane.

PM Cum Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #20 Gothard Street at Driveway No. 3

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: C[19.0]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	1	0	2	0	0		0	0	1	1	0		0	0	1!	0	0		0	0	0	0	0	
Volume Module:																								
Base Vol:	10	1104		0			0	1100		1			3		0		15		0		0		0	
Growth Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	10	1104		0			0	1100		1			3		0		15		0		0		0	
Added Vol:	0	0		0			0	0		0			0		0		0		0		0		0	
PasserByVol:	0	0		0			0	0		0			0		0		0		0		0		0	
Initial Fut:	10	1104		0			0	1100		1			3		0		15		0		0		0	
User Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00		1.00		1.00		1.00		1.00		1.00	
PHF Volume:	10	1104		0			0	1100		1			3		0		15		0		0		0	
Reduct Vol:	0	0		0			0	0		0			0		0		0		0		0		0	
FinalVolume:	10	1104		0			0	1100		1			3		0		15		0		0		0	
Critical Gap Module:																								
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx							6.8		6.5		6.9		xxxxx	xxxx	xxxxx			
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx							3.5		4.0		3.3		xxxxx	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	1101	xxxx	xxxxx	xxxx	xxxx	xxxxx							1673	2225		551			xxxx	xxxx	xxxxx			
Potent Cap.:	642	xxxx	xxxxx	xxxx	xxxx	xxxxx							88		44		484		xxxx	xxxx	xxxxx			
Move Cap.:	642	xxxx	xxxxx	xxxx	xxxx	xxxxx							87		43		484		xxxx	xxxx	xxxxx			
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx							0.03		0.00		0.03		xxxx	xxxx	xxxx			
Level Of Service Module:																								
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx							xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Control Del:	10.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx							xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
LOS by Move:	B	*		*	*	*							*	*	*				*	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx							xxxx	275	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							xxxxx	0.2	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							xxxxx	19.0	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	*	*	*	*							*	C	*				*	*	*			
ApproachDel:	xxxxxx			xxxxxx									19.0						xxxxxx					
ApproachLOS:	*			*									C						*					

Note: Queue reported is the number of cars per lane.

AM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #21 Gothard Street at Edinger Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.669
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	102	428	139	133	390	169	76	1312	146	184	605	172
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	102	428	139	133	390	169	76	1312	146	184	605	172
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	102	428	139	133	390	169	76	1312	146	184	605	172
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	102	428	139	133	390	169	76	1312	146	184	605	172
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	102	428	139	133	390	169	76	1312	146	184	605	172
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	102	428	139	133	390	169	76	1312	146	184	605	172
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.40	0.60	1.00	2.70	0.30	1.00	2.34	0.66
Final Sat.:	1700	3400	1700	1700	2372	1028	1700	4589	511	1700	3971	1129
Capacity Analysis Module:												
Vol/Sat:	0.06	0.13	0.08	0.08	0.16	0.16	0.04	0.29	0.29	0.11	0.15	0.15
Crit Moves:	****				****			****			****	

AM Cum Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #21 Gothard Street at Edinger Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.674
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	106	432	139	137	391	169	76	1323	147	184	648	183
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	106	432	139	137	391	169	76	1323	147	184	648	183
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	106	432	139	137	391	169	76	1323	147	184	648	183
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	106	432	139	137	391	169	76	1323	147	184	648	183
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	106	432	139	137	391	169	76	1323	147	184	648	183
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	106	432	139	137	391	169	76	1323	147	184	648	183
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.40	0.60	1.00	2.70	0.30	1.00	2.34	0.66
Final Sat.:	1700	3400	1700	1700	2374	1026	1700	4590	510	1700	3977	1123
Capacity Analysis Module:												
Vol/Sat:	0.06	0.13	0.08	0.08	0.16	0.16	0.04	0.29	0.29	0.11	0.16	0.16
Crit Moves:	****				****			****			****	

AM Cum Plus Project
2.13.3396.2 Goldenwest College
Mitigation

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #21 Gothard Street at Edinger Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.674
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	2 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	106	432	139	137	391	169	76	1323	147	184	648	183
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	106	432	139	137	391	169	76	1323	147	184	648	183
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	106	432	139	137	391	169	76	1323	147	184	648	183
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	106	432	139	137	391	169	76	1323	147	184	648	183
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	106	432	139	137	391	169	76	1323	147	184	648	183
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	106	432	139	137	391	169	76	1323	147	184	648	183
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.40	0.60	1.00	2.70	0.30	1.00	3.00	1.00
Final Sat.:	1700	3400	1700	1700	2374	1026	1700	4590	510	1700	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.06	0.13	0.08	0.08	0.16	0.16	0.04	0.29	0.29	0.11	0.13	0.11
Crit Moves:	****				****			****		****		

PM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #21 Gothard Street at Edinger Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.897
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	85	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	169	779	220	277	630	201	221	1023	120	146	1401	255
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	169	779	220	277	630	201	221	1023	120	146	1401	255
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	169	779	220	277	630	201	221	1023	120	146	1401	255
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	169	779	220	277	630	201	221	1023	120	146	1401	255
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	169	779	220	277	630	201	221	1023	120	146	1401	255
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	169	779	220	277	630	201	221	1023	120	146	1401	255
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.52	0.48	1.00	2.69	0.31	1.00	2.54	0.46
Final Sat.:	1700	3400	1700	1700	2578	822	1700	4565	535	1700	4315	785
Capacity Analysis Module:												
Vol/Sat:	0.10	0.23	0.13	0.16	0.24	0.24	0.13	0.22	0.22	0.09	0.32	0.32
Crit Moves:		****		****			****				****	

PM Cum Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #21 Gothard Street at Edinger Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.942
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxx
Optimal Cycle:	121	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	172	798	220	316	647	204	225	1058	123	146	1431	300
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	172	798	220	316	647	204	225	1058	123	146	1431	300
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	172	798	220	316	647	204	225	1058	123	146	1431	300
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	172	798	220	316	647	204	225	1058	123	146	1431	300
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	172	798	220	316	647	204	225	1058	123	146	1431	300
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	172	798	220	316	647	204	225	1058	123	146	1431	300
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.52	0.48	1.00	2.69	0.31	1.00	2.48	0.52
Final Sat.:	1700	3400	1700	1700	2585	815	1700	4569	531	1700	4216	884
Capacity Analysis Module:												
Vol/Sat:	0.10	0.23	0.13	0.19	0.25	0.25	0.13	0.23	0.23	0.09	0.34	0.34
Crit Moves:		****			****			****			****	

PM Cum Plus Project
2.13.3396.2 Goldenwest College
Mitigation

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #21 Gothard Street at Edinger Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.884
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	78	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	1 1	0	1 0	2 1	0	1 0	3 0	1
Volume Module:												
Base Vol:	172	798	220	316	647	204	225	1058	123	146	1431	300
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	172	798	220	316	647	204	225	1058	123	146	1431	300
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	172	798	220	316	647	204	225	1058	123	146	1431	300
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	172	798	220	316	647	204	225	1058	123	146	1431	300
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	172	798	220	316	647	204	225	1058	123	146	1431	300
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	172	798	220	316	647	204	225	1058	123	146	1431	300
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.52	0.48	1.00	2.69	0.31	1.00	3.00	1.00
Final Sat.:	1700	3400	1700	1700	2585	815	1700	4569	531	1700	5100	1700
Capacity Analysis Module:												
Vol/Sat:	0.10	0.23	0.13	0.19	0.25	0.25	0.13	0.23	0.23	0.09	0.28	0.18
Crit Moves:		****		****			****				****	

AM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #22 Gothard Street at Heil Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.555
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	26	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	116	541	117	57	494	46	96	705	218	143	419	73
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	116	541	117	57	494	46	96	705	218	143	419	73
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	116	541	117	57	494	46	96	705	218	143	419	73
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	116	541	117	57	494	46	96	705	218	143	419	73
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	116	541	117	57	494	46	96	705	218	143	419	73
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	116	541	117	57	494	46	96	705	218	143	419	73
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	3400	1700	1700	3400	1700	1700	3400	1700	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.07	0.16	0.07	0.03	0.15	0.03	0.06	0.21	0.13	0.08	0.12	0.04
Crit Moves:	****				****			****			****	

AM Cum Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #22 Gothard Street at Heil Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.555
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	26	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	116	548	117	57	495	46	97	705	218	143	419	73
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	116	548	117	57	495	46	97	705	218	143	419	73
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	116	548	117	57	495	46	97	705	218	143	419	73
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	116	548	117	57	495	46	97	705	218	143	419	73
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	116	548	117	57	495	46	97	705	218	143	419	73
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	116	548	117	57	495	46	97	705	218	143	419	73
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	3400	1700	1700	3400	1700	1700	3400	1700	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.07	0.16	0.07	0.03	0.15	0.03	0.06	0.21	0.13	0.08	0.12	0.04
Crit Moves:	****				****			****		****		

PM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #22 Gothard Street at Heil Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.671
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	187	1003	198	83	718	144	133	593	134	135	675	105
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	187	1003	198	83	718	144	133	593	134	135	675	105
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	187	1003	198	83	718	144	133	593	134	135	675	105
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	187	1003	198	83	718	144	133	593	134	135	675	105
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	187	1003	198	83	718	144	133	593	134	135	675	105
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	187	1003	198	83	718	144	133	593	134	135	675	105
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	3400	1700	1700	3400	1700	1700	3400	1700	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.11	0.30	0.12	0.05	0.21	0.08	0.08	0.17	0.08	0.08	0.20	0.06
Crit Moves:		****			****			****			****	

PM Cum Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #22 Gothard Street at Heil Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.680
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	187	1015	198	83	730	152	143	593	134	135	675	105
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	187	1015	198	83	730	152	143	593	134	135	675	105
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	187	1015	198	83	730	152	143	593	134	135	675	105
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	187	1015	198	83	730	152	143	593	134	135	675	105
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	187	1015	198	83	730	152	143	593	134	135	675	105
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	187	1015	198	83	730	152	143	593	134	135	675	105
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	3400	1700	1700	3400	1700	1700	3400	1700	1700	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.11	0.30	0.12	0.05	0.21	0.09	0.08	0.17	0.08	0.08	0.20	0.06
Crit Moves:		****			****			****			****	

AM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #23 I-405 SB Ramps at Center Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.621
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Permitted		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	2	0	0	1	0	2	0	0	0	2	0	1
Volume Module:												
Base Vol:	0	0	0	548	0	93	132	291	0	0	489	565
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	548	0	93	132	291	0	0	489	565
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	548	0	93	132	291	0	0	489	565
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	548	0	93	132	291	0	0	489	565
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	548	0	93	132	291	0	0	489	565
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	548	0	93	132	291	0	0	489	565
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	3400	0	1700	1700	3400	0	0	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.16	0.00	0.05	0.08	0.09	0.00	0.00	0.14	0.33
Crit Moves:				****			****					****

AM Cum Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #23 I-405 SB Ramps at Center Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.625
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Permitted		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 0	2 0	0	0 1	1 0	2	0 0	0 0	2	0 1
Volume Module:												
Base Vol:	0	0	0	548	0	102	138	293	0	0	510	565
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	548	0	102	138	293	0	0	510	565
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	548	0	102	138	293	0	0	510	565
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	548	0	102	138	293	0	0	510	565
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	548	0	102	138	293	0	0	510	565
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	548	0	102	138	293	0	0	510	565
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	3400	0	1700	1700	3400	0	0	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.16	0.00	0.06	0.08	0.09	0.00	0.00	0.15	0.33
Crit Moves:				****			****					****

AM Cum Plus Project
2.13.3396.2 Goldenwest College
Mitigation

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #23 I-405 SB Ramps at Center Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.464
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxx
Optimal Cycle:	22	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Permitted		
Rights:	Include			Ovl			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 0	2 0	0	0 1	1 0	2	0 0	0 0	2	0 1
Volume Module:												
Base Vol:	0	0	0	548	0	102	138	293	0	0	510	565
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	548	0	102	138	293	0	0	510	565
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	548	0	102	138	293	0	0	510	565
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	548	0	102	138	293	0	0	510	565
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	548	0	102	138	293	0	0	510	565
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	548	0	102	138	293	0	0	510	565
OvlAdjVol:												291
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	3400	0	1700	1700	3400	0	0	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.16	0.00	0.06	0.08	0.09	0.00	0.00	0.15	0.33
OvlAdjV/S:												0.17
Crit Moves:				****			****					****

PM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #23 I-405 SB Ramps at Center Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	1.007
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Permitted		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 0	2 0	0	0 1	1 0	2	0 0	0 0	2	0 1
Volume Module:												
Base Vol:	0	0	0	871	0	397	521	707	0	0	556	671
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	871	0	397	521	707	0	0	556	671
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	871	0	397	521	707	0	0	556	671
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	871	0	397	521	707	0	0	556	671
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	871	0	397	521	707	0	0	556	671
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	871	0	397	521	707	0	0	556	671
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	3400	0	1700	1700	3400	0	0	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.26	0.00	0.23	0.31	0.21	0.00	0.00	0.16	0.39
Crit Moves:				****			****					****

PM Cum Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #23 I-405 SB Ramps at Center Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	1.026
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Permitted		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 0	2 0	0	0 1	1 0	2	0 0	0 0	2	0 1
Volume Module:												
Base Vol:	0	0	0	871	0	404	553	715	0	0	590	671
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	871	0	404	553	715	0	0	590	671
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	871	0	404	553	715	0	0	590	671
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	871	0	404	553	715	0	0	590	671
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	871	0	404	553	715	0	0	590	671
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	871	0	404	553	715	0	0	590	671
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	3400	0	1700	1700	3400	0	0	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.26	0.00	0.24	0.33	0.21	0.00	0.00	0.17	0.39
Crit Moves:				****			****					****

PM Cum Plus Project
2.13.3396.2 Goldenwest College
Mitigation

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #23 I-405 SB Ramps at Center Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.805
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Permitted		
Rights:	Include			Ovl			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 0	2	0 0	0 1	1	0 2	0 0	0 0	2	0 1
Volume Module:												
Base Vol:	0	0	0	871	0	404	553	715	0	0	590	671
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	871	0	404	553	715	0	0	590	671
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	871	0	404	553	715	0	0	590	671
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	871	0	404	553	715	0	0	590	671
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	871	0	404	553	715	0	0	590	671
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	871	0	404	553	715	0	0	590	671
OvlAdjVol:												236
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	3400	0	1700	1700	3400	0	0	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.26	0.00	0.24	0.33	0.21	0.00	0.00	0.17	0.39
OvlAdjV/S:												0.14
Crit Moves:				****			****				****	

AM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #24 Beach Boulevard at McFadden Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.905
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	90	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	2 0	3 1	0	2 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	163	2344	206	232	2933	412	354	442	150	458	577	140
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	163	2344	206	232	2933	412	354	442	150	458	577	140
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	163	2344	206	232	2933	412	354	442	150	458	577	140
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	163	2344	206	232	2933	412	354	442	150	458	577	140
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	163	2344	206	232	2933	412	354	442	150	458	577	140
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	163	2344	206	232	2933	412	354	442	150	458	577	140
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.68	0.32	2.00	3.51	0.49	2.00	1.49	0.51	2.00	1.61	0.39
Final Sat.:	3400	6251	549	3400	5962	838	3400	2539	861	3400	2736	664
Capacity Analysis Module:												
Vol/Sat:	0.05	0.37	0.38	0.07	0.49	0.49	0.10	0.17	0.17	0.13	0.21	0.21
Crit Moves:	****				****		****				****	

AM Cum Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #24 Beach Boulevard at McFadden Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.913
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	95	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	2 0	3 1	0	2 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	163	2344	206	232	2933	433	360	444	150	458	587	140
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	163	2344	206	232	2933	433	360	444	150	458	587	140
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	163	2344	206	232	2933	433	360	444	150	458	587	140
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	163	2344	206	232	2933	433	360	444	150	458	587	140
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	163	2344	206	232	2933	433	360	444	150	458	587	140
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	163	2344	206	232	2933	433	360	444	150	458	587	140
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.68	0.32	2.00	3.49	0.51	2.00	1.49	0.51	2.00	1.61	0.39
Final Sat.:	3400	6251	549	3400	5925	875	3400	2541	859	3400	2745	655
Capacity Analysis Module:												
Vol/Sat:	0.05	0.37	0.38	0.07	0.49	0.50	0.11	0.17	0.17	0.13	0.21	0.21
Crit Moves:	****					****	****				****	

PM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

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Intersection #24 Beach Boulevard at McFadden Avenue

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Cycle (sec):	100	Critical Vol./Cap.(X):	0.926
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	105	Level Of Service:	E

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	2 0	3 1	0	2 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	187	3026	360	218	2038	257	402	480	164	424	377	144
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	187	3026	360	218	2038	257	402	480	164	424	377	144
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	187	3026	360	218	2038	257	402	480	164	424	377	144
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	187	3026	360	218	2038	257	402	480	164	424	377	144
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	187	3026	360	218	2038	257	402	480	164	424	377	144
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	187	3026	360	218	2038	257	402	480	164	424	377	144
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.57	0.43	2.00	3.55	0.45	2.00	1.49	0.51	2.00	1.45	0.55
Final Sat.:	3400	6077	723	3400	6039	761	3400	2534	866	3400	2460	940
Capacity Analysis Module:												
Vol/Sat:	0.06	0.50	0.50	0.06	0.34	0.34	0.12	0.19	0.19	0.12	0.15	0.15
Crit Moves:		****		****				****		****		

****

PM Cum Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #24 Beach Boulevard at McFadden Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.930
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	109	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	2 0	3 1	0	2 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	187	3026	360	218	2038	284	428	494	164	424	391	144
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	187	3026	360	218	2038	284	428	494	164	424	391	144
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	187	3026	360	218	2038	284	428	494	164	424	391	144
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	187	3026	360	218	2038	284	428	494	164	424	391	144
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	187	3026	360	218	2038	284	428	494	164	424	391	144
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	187	3026	360	218	2038	284	428	494	164	424	391	144
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.57	0.43	2.00	3.51	0.49	2.00	1.50	0.50	2.00	1.46	0.54
Final Sat.:	3400	6077	723	3400	5968	832	3400	2553	847	3400	2485	915
Capacity Analysis Module:												
Vol/Sat:	0.06	0.50	0.50	0.06	0.34	0.34	0.13	0.19	0.19	0.12	0.16	0.16
Crit Moves:		****		****				****		****		

AM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #25 Beach Boulevard at Center Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.725
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4	0 0	0 0	4	0 1	2 0	0	0 2	0 0	0	0 0
Volume Module:												
Base Vol:	0	2497	0	0	3527	1041	158	0	532	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2497	0	0	3527	1041	158	0	532	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	2497	0	0	3527	1041	158	0	532	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2497	0	0	3527	0	158	0	532	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2497	0	0	3527	0	158	0	532	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2497	0	0	3527	0	158	0	532	0	0	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.00	0.00	0.00	4.00	1.00	2.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	0	6800	0	0	6800	1700	3400	0	3400	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.37	0.00	0.00	0.52	0.00	0.05	0.00	0.16	0.00	0.00	0.00
Crit Moves:	****				****				****			

AM Cum Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #25 Beach Boulevard at Center Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.729
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4	0 0	0 0	4	0 1	2 0	0	0 2	0 0	0	0 0
Volume Module:												
Base Vol:	0	2497	0	0	3555	1062	160	0	532	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2497	0	0	3555	1062	160	0	532	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	2497	0	0	3555	1062	160	0	532	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2497	0	0	3555	0	160	0	532	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2497	0	0	3555	0	160	0	532	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2497	0	0	3555	0	160	0	532	0	0	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.00	0.00	0.00	4.00	1.00	2.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	0	6800	0	0	6800	1700	3400	0	3400	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.37	0.00	0.00	0.52	0.00	0.05	0.00	0.16	0.00	0.00	0.00
Crit Moves:	****				****				****			

PM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #25 Beach Boulevard at Center Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.854
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	66	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4	0 0	0 0	4	0 1	2 0	0	0 2	0 0	0	0 0
Volume Module:												
Base Vol:	0	3066	0	0	2869	1208	383	0	1199	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	3066	0	0	2869	1208	383	0	1199	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	3066	0	0	2869	1208	383	0	1199	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	3066	0	0	2869	0	383	0	1199	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	3066	0	0	2869	0	383	0	1199	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	3066	0	0	2869	0	383	0	1199	0	0	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.00	0.00	0.00	4.00	1.00	2.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	0	6800	0	0	6800	1700	3400	0	3400	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.45	0.00	0.00	0.42	0.00	0.11	0.00	0.35	0.00	0.00	0.00
Crit Moves:		****		****					****			

PM Cum Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #25 Beach Boulevard at Center Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.854
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	66	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 0	0	0 0	4 0	1	2 0	0 0	2	0 0	0 0	0
Volume Module:												
Base Vol:	0	3066	0	0	2889	1242	391	0	1199	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	3066	0	0	2889	1242	391	0	1199	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	3066	0	0	2889	1242	391	0	1199	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	3066	0	0	2889	0	391	0	1199	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	3066	0	0	2889	0	391	0	1199	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	3066	0	0	2889	0	391	0	1199	0	0	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.00	0.00	0.00	4.00	1.00	2.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	0	6800	0	0	6800	1700	3400	0	3400	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.45	0.00	0.00	0.42	0.00	0.12	0.00	0.35	0.00	0.00	0.00
Crit Moves:		****		****					****			

AM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #26 Beach Boulevard at Edinger Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.840
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	64	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	4 0	2	2 0	3 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	153	1845	319	534	2800	679	295	1046	187	149	623	326
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	153	1845	319	534	2800	679	295	1046	187	149	623	326
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	153	1845	319	534	2800	679	295	1046	187	149	623	326
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	153	1845	319	534	2800	679	295	1046	187	149	623	326
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	153	1845	319	534	2800	679	295	1046	187	149	623	326
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	153	1845	319	534	2800	679	295	1046	187	149	623	326
OvlAdjVol:						384			111			
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	4.00	2.00	2.00	3.00	1.00	2.00	2.00	1.00
Final Sat.:	3400	5100	1700	3400	6800	3400	3400	5100	1700	3400	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.05	0.36	0.19	0.16	0.41	0.20	0.09	0.21	0.11	0.04	0.18	0.19
OvlAdjV/S:						0.11			0.07			
Crit Moves:		****			****			****			****	

AM Cum Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #26 Beach Boulevard at Edinger Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.842
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	63	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	4 0	2	2 0	3 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	169	1845	319	534	2800	707	295	1057	191	149	634	326
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	169	1845	319	534	2800	707	295	1057	191	149	634	326
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	169	1845	319	534	2800	707	295	1057	191	149	634	326
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	169	1845	319	534	2800	707	295	1057	191	149	634	326
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	169	1845	319	534	2800	707	295	1057	191	149	634	326
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	169	1845	319	534	2800	707	295	1057	191	149	634	326
OvlAdjVol:						412			107			
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	4.00	2.00	2.00	3.00	1.00	2.00	2.00	1.00
Final Sat.:	3400	5100	1700	3400	6800	3400	3400	5100	1700	3400	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.05	0.36	0.19	0.16	0.41	0.21	0.09	0.21	0.11	0.04	0.19	0.19
OvlAdjV/S:						0.12			0.06			
Crit Moves:		****			****			****			****	

PM Cum
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

****

Intersection #26 Beach Boulevard at Edinger Avenue

****

Cycle (sec):	100	Critical Vol./Cap.(X):	0.985
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	E

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	4 0	2	2 0	3 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	454	2278	605	427	2781	812	401	968	315	322	834	267
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	454	2278	605	427	2781	812	401	968	315	322	834	267
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	454	2278	605	427	2781	812	401	968	315	322	834	267
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	454	2278	605	427	2781	812	401	968	315	322	834	267
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	454	2278	605	427	2781	812	401	968	315	322	834	267
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	454	2278	605	427	2781	812	401	968	315	322	834	267
OvlAdjVol:						411			88			
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	4.00	2.00	2.00	3.00	1.00	2.00	2.00	1.00
Final Sat.:	3400	5100	1700	3400	6800	3400	3400	5100	1700	3400	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.13	0.45	0.36	0.13	0.41	0.24	0.12	0.19	0.19	0.09	0.25	0.16
OvlAdjV/S:						0.12			0.05			
Crit Moves:		****			****			****				****

****

PM Cum Plus Project
2.13.3396.2 Goldenwest College

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #26 Beach Boulevard at Edinger Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.993
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	4 0	2	2 0	3 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	486	2278	605	427	2781	832	401	1013	345	322	858	267
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	486	2278	605	427	2781	832	401	1013	345	322	858	267
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	486	2278	605	427	2781	832	401	1013	345	322	858	267
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	486	2278	605	427	2781	832	401	1013	345	322	858	267
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	486	2278	605	427	2781	832	401	1013	345	322	858	267
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	486	2278	605	427	2781	832	401	1013	345	322	858	267
OvlAdjVol:						431			102			
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	4.00	2.00	2.00	3.00	1.00	2.00	2.00	1.00
Final Sat.:	3400	5100	1700	3400	6800	3400	3400	5100	1700	3400	3400	1700
Capacity Analysis Module:												
Vol/Sat:	0.14	0.45	0.36	0.13	0.41	0.24	0.12	0.20	0.20	0.09	0.25	0.16
OvlAdjV/S:						0.13			0.06			
Crit Moves:		****			****			****			****	

APPENDIX F

CALTRANS INTERSECTION LEVEL OF SERVICE CALCULATION WORKSHEETS

APPENDIX F-I

EXISTING PLUS PROJECT TRAFFIC CONDITIONS

AM Existing
2.13.3396.2 Goldenwest College
Caltrans

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Goldenwest Street at I-405 SB Ramps

Cycle (sec):	90	Critical Vol./Cap.(X):	0.426
Loss Time (sec):	8	Average Delay (sec/veh):	13.6
Optimal Cycle:	28	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	6	0	0	6	6	6	6	6	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	0	0 0	2 0	1	1 0	1! 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	0	1230	0	0	791	295	316	0	341	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1230	0	0	791	295	316	0	341	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1230	0	0	791	295	316	0	341	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.00	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	1295	0	0	833	0	333	0	359	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1295	0	0	833	0	333	0	359	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1295	0	0	833	0	333	0	359	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	1.00	1.00	0.95	1.00	0.90	1.00	0.90	1.00	1.00	1.00
Lanes:	0.00	3.00	0.00	0.00	2.00	1.00	1.48	0.00	1.52	0.00	0.00	0.00
Final Sat.:	0	5187	0	0	3610	1900	2535	0	2600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.25	0.00	0.00	0.23	0.00	0.13	0.00	0.14	0.00	0.00	0.00
Crit Moves:		****							****			
Green/Cycle:	0.00	0.59	0.00	0.00	0.59	0.00	0.32	0.00	0.32	0.00	0.00	0.00
Volume/Cap:	0.00	0.43	0.00	0.00	0.39	0.00	0.40	0.00	0.43	0.00	0.00	0.00
Delay/Veh:	0.0	10.3	0.0	0.0	10.1	0.0	23.8	0.0	24.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	10.3	0.0	0.0	10.1	0.0	23.8	0.0	24.0	0.0	0.0	0.0
LOS by Move:	A	B	A	A	B	A	C	A	C	A	A	A
HCM2kAvgQ:	0	7	0	0	7	0	5	0	5	0	0	0

Note: Queue reported is the number of cars per lane.

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AM Existing Plus Project
2.13.3396.2 Goldenwest College
Caltrans

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Goldenwest Street at I-405 SB Ramps

Cycle (sec):	90	Critical Vol./Cap.(X):	0.439
Loss Time (sec):	8	Average Delay (sec/veh):	14.0
Optimal Cycle:	29	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	6	0	0	6	6	6	6	6	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3	0 0	0 0	2	0 1	1 0	1!	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	0	1241	0	0	803	295	316	0	371	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1241	0	0	803	295	316	0	371	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1241	0	0	803	295	316	0	371	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.00	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	1306	0	0	845	0	333	0	391	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1306	0	0	845	0	333	0	391	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1306	0	0	845	0	333	0	391	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	1.00	1.00	0.95	1.00	0.90	1.00	0.90	1.00	1.00	1.00
Lanes:	0.00	3.00	0.00	0.00	2.00	1.00	1.46	0.00	1.54	0.00	0.00	0.00
Final Sat.:	0	5187	0	0	3610	1900	2493	0	2630	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.25	0.00	0.00	0.23	0.00	0.13	0.00	0.15	0.00	0.00	0.00
Crit Moves:		****							****			
Green/Cycle:	0.00	0.57	0.00	0.00	0.57	0.00	0.34	0.00	0.34	0.00	0.00	0.00
Volume/Cap:	0.00	0.44	0.00	0.00	0.41	0.00	0.39	0.00	0.44	0.00	0.00	0.00
Delay/Veh:	0.0	11.1	0.0	0.0	10.8	0.0	22.9	0.0	23.4	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	11.1	0.0	0.0	10.8	0.0	22.9	0.0	23.4	0.0	0.0	0.0
LOS by Move:	A	B	A	A	B	A	C	A	C	A	A	A
HCM2kAvgQ:	0	8	0	0	7	0	5	0	6	0	0	0

Note: Queue reported is the number of cars per lane.

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PM Existing
2.13.3396.2 Goldenwest College
Caltrans

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Goldenwest Street at I-405 SB Ramps

Cycle (sec):	90	Critical Vol./Cap.(X):	0.611
Loss Time (sec):	8	Average Delay (sec/veh):	13.0
Optimal Cycle:	39	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	6	0	0	6	6	6	6	6	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3	0 0	0 0	2	0 1	1 0	1!	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	0	1951	0	0	787	468	276	0	413	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1951	0	0	787	468	276	0	413	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1951	0	0	787	468	276	0	413	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.00	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	2054	0	0	828	0	291	0	435	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2054	0	0	828	0	291	0	435	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2054	0	0	828	0	291	0	435	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	1.00	1.00	0.95	1.00	0.89	1.00	0.89	1.00	1.00	1.00
Lanes:	0.00	3.00	0.00	0.00	2.00	1.00	1.40	0.00	1.60	0.00	0.00	0.00
Final Sat.:	0	5187	0	0	3610	1900	2373	0	2710	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.40	0.00	0.00	0.23	0.00	0.12	0.00	0.16	0.00	0.00	0.00
Crit Moves:		****							****			
Green/Cycle:	0.00	0.65	0.00	0.00	0.65	0.00	0.26	0.00	0.26	0.00	0.00	0.00
Volume/Cap:	0.00	0.61	0.00	0.00	0.35	0.00	0.47	0.00	0.61	0.00	0.00	0.00
Delay/Veh:	0.0	9.5	0.0	0.0	7.3	0.0	28.1	0.0	30.1	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	9.5	0.0	0.0	7.3	0.0	28.1	0.0	30.1	0.0	0.0	0.0
LOS by Move:	A	A	A	A	A	A	C	A	C	A	A	A
HCM2kAvgQ:	0	12	0	0	6	0	5	0	7	0	0	0

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Goldenwest Street at I-405 SB Ramps

Cycle (sec):	90	Critical Vol./Cap.(X):	0.634
Loss Time (sec):	8	Average Delay (sec/veh):	13.5
Optimal Cycle:	41	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	6	0	0	6	6	6	6	6	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3 0	0	0 0	2 0	1	1 0	1! 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	0	2000	0	0	802	468	276	0	447	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2000	0	0	802	468	276	0	447	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	2000	0	0	802	468	276	0	447	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.00	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	2105	0	0	844	0	291	0	471	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2105	0	0	844	0	291	0	471	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2105	0	0	844	0	291	0	471	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	1.00	1.00	0.95	1.00	0.89	1.00	0.89	1.00	1.00	1.00
Lanes:	0.00	3.00	0.00	0.00	2.00	1.00	1.38	0.00	1.62	0.00	0.00	0.00
Final Sat.:	0	5187	0	0	3610	1900	2336	0	2736	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.41	0.00	0.00	0.23	0.00	0.12	0.00	0.17	0.00	0.00	0.00
Crit Moves:		****							****			
Green/Cycle:	0.00	0.64	0.00	0.00	0.64	0.00	0.27	0.00	0.27	0.00	0.00	0.00
Volume/Cap:	0.00	0.63	0.00	0.00	0.37	0.00	0.46	0.00	0.63	0.00	0.00	0.00
Delay/Veh:	0.0	10.2	0.0	0.0	7.7	0.0	27.5	0.0	30.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	10.2	0.0	0.0	7.7	0.0	27.5	0.0	30.0	0.0	0.0	0.0
LOS by Move:	A	B	A	A	A	A	C	A	C	A	A	A
HCM2kAvgQ:	0	13	0	0	6	0	5	0	8	0	0	0

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #23 I-405 SB Ramps at Center Avenue

Cycle (sec):	90	Critical Vol./Cap.(X):	0.560
Loss Time (sec):	12	Average Delay (sec/veh):	19.0
Optimal Cycle:	44	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Permitted		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	6	0	6	6	6	0	0	6	6
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	2	0	0	1	0	2	0	0	1
Volume Module:												
Base Vol:	0	0	0	447	0	68	85	183	0	0	398	462
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	447	0	68	85	183	0	0	398	462
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	447	0	68	85	183	0	0	398	462
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	471	0	72	89	193	0	0	419	486
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	471	0	72	89	193	0	0	419	486
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	471	0	72	89	193	0	0	419	486
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.92	1.00	0.85	0.95	0.95	1.00	1.00	0.95	0.85
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	3502	0	1615	1805	3610	0	0	3610	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.00	0.04	0.05	0.05	0.00	0.00	0.12	0.30
Crit Moves:				****			****					****
Green/Cycle:	0.00	0.00	0.00	0.24	0.00	0.33	0.09	0.63	0.00	0.00	0.54	0.54
Volume/Cap:	0.00	0.00	0.00	0.56	0.00	0.13	0.56	0.09	0.00	0.00	0.22	0.56
Delay/Veh:	0.0	0.0	0.0	30.9	0.0	21.3	43.7	6.6	0.0	0.0	10.9	14.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	30.9	0.0	21.3	43.7	6.6	0.0	0.0	10.9	14.6
LOS by Move:	A	A	A	C	A	C	D	A	A	A	B	B
HCM2kAvgQ:	0	0	0	7	0	1	3	1	0	0	3	9

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #23 I-405 SB Ramps at Center Avenue

Cycle (sec):	90	Critical Vol./Cap.(X):	0.564
Loss Time (sec):	12	Average Delay (sec/veh):	19.2
Optimal Cycle:	45	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Permitted		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	6	0	6	6	6	0	0	6	6
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 0	2 0	0	0 1	1 0	2	0 0	0 0	2	0 1
Volume Module:												
Base Vol:	0	0	0	447	0	77	91	185	0	0	419	462
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	447	0	77	91	185	0	0	419	462
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	447	0	77	91	185	0	0	419	462
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	471	0	81	96	195	0	0	441	486
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	471	0	81	96	195	0	0	441	486
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	471	0	81	96	195	0	0	441	486
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.92	1.00	0.85	0.95	0.95	1.00	1.00	0.95	0.85
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	3502	0	1615	1805	3610	0	0	3610	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.00	0.05	0.05	0.05	0.00	0.00	0.12	0.30
Crit Moves:				****			****					****
Green/Cycle:	0.00	0.00	0.00	0.24	0.00	0.33	0.09	0.63	0.00	0.00	0.53	0.53
Volume/Cap:	0.00	0.00	0.00	0.56	0.00	0.15	0.56	0.09	0.00	0.00	0.23	0.56
Delay/Veh:	0.0	0.0	0.0	31.0	0.0	21.2	43.3	6.6	0.0	0.0	11.2	14.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	31.0	0.0	21.2	43.3	6.6	0.0	0.0	11.2	14.8
LOS by Move:	A	A	A	C	A	C	D	A	A	A	B	B
HCM2kAvgQ:	0	0	0	7	0	2	3	1	0	0	3	9

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #23 I-405 SB Ramps at Center Avenue

Cycle (sec):	90	Critical Vol./Cap.(X):	0.935
Loss Time (sec):	12	Average Delay (sec/veh):	35.7
Optimal Cycle:	120	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Permitted		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	6	0	6	6	6	0	0	6	6
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 0	2 0	0	0 1	1 0	2	0 0	0 0	2	0 1
Volume Module:												
Base Vol:	0	0	0	710	0	286	415	552	0	0	414	545
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	710	0	286	415	552	0	0	414	545
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	710	0	286	415	552	0	0	414	545
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	747	0	301	437	581	0	0	436	574
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	747	0	301	437	581	0	0	436	574
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	747	0	301	437	581	0	0	436	574
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.92	1.00	0.85	0.95	0.95	1.00	1.00	0.95	0.85
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	3502	0	1615	1805	3610	0	0	3610	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.21	0.00	0.19	0.24	0.16	0.00	0.00	0.12	0.36
Crit Moves:				****			****					****
Green/Cycle:	0.00	0.00	0.00	0.23	0.00	0.49	0.26	0.64	0.00	0.00	0.38	0.38
Volume/Cap:	0.00	0.00	0.00	0.94	0.00	0.38	0.94	0.25	0.00	0.00	0.32	0.94
Delay/Veh:	0.0	0.0	0.0	52.1	0.0	14.9	58.9	7.1	0.0	0.0	19.8	48.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	52.1	0.0	14.9	58.9	7.1	0.0	0.0	19.8	48.6
LOS by Move:	A	A	A	D	A	B	E	A	A	A	B	D
HCM2kAvgQ:	0	0	0	15	0	5	16	4	0	0	5	20

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #23 I-405 SB Ramps at Center Avenue

Cycle (sec):	90	Critical Vol./Cap.(X):	0.957
Loss Time (sec):	12	Average Delay (sec/veh):	38.2
Optimal Cycle:	134	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Permitted		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	6	0	6	6	6	0	0	6	6
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 0	2 0	0	0 1	1 0	2	0 0	0 0	2	0 1
Volume Module:												
Base Vol:	0	0	0	710	0	293	447	560	0	0	448	545
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	710	0	293	447	560	0	0	448	545
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	710	0	293	447	560	0	0	448	545
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	747	0	308	471	589	0	0	472	574
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	747	0	308	471	589	0	0	472	574
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	747	0	308	471	589	0	0	472	574
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.92	1.00	0.85	0.95	0.95	1.00	1.00	0.95	0.85
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	3502	0	1615	1805	3610	0	0	3610	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.21	0.00	0.19	0.26	0.16	0.00	0.00	0.13	0.36
Crit Moves:				****			****					****
Green/Cycle:	0.00	0.00	0.00	0.22	0.00	0.50	0.27	0.64	0.00	0.00	0.37	0.37
Volume/Cap:	0.00	0.00	0.00	0.96	0.00	0.39	0.96	0.25	0.00	0.00	0.35	0.96
Delay/Veh:	0.0	0.0	0.0	56.8	0.0	14.5	62.1	6.9	0.0	0.0	20.6	53.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	56.8	0.0	14.5	62.1	6.9	0.0	0.0	20.6	53.9
LOS by Move:	A	A	A	E	A	B	E	A	A	A	C	D
HCM2kAvgQ:	0	0	0	15	0	5	18	4	0	0	5	21

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #24 Beach Boulevard at McFadden Avenue

Cycle (sec):	120	Critical Vol./Cap.(X):	0.825
Loss Time (sec):	16	Average Delay (sec/veh):	39.6
Optimal Cycle:	100	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	6	28	28	6	28	28	6	28	28	6	28	28
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3	1 0	2 0	3	1 0	2 0	1	1 0	2 0	1	1 0
Volume Module:												
Base Vol:	129	1864	144	190	2377	333	264	357	118	373	468	115
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	129	1864	144	190	2377	333	264	357	118	373	468	115
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	129	1864	144	190	2377	333	264	357	118	373	468	115
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	136	1962	152	200	2502	351	278	376	124	393	493	121
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	136	1962	152	200	2502	351	278	376	124	393	493	121
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	136	1962	152	200	2502	351	278	376	124	393	493	121
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.90	0.90	0.92	0.89	0.89	0.92	0.91	0.91	0.92	0.92	0.92
Lanes:	2.00	3.71	0.29	2.00	3.51	0.49	2.00	1.50	0.50	2.00	1.61	0.39
Final Sat.:	3502	6349	491	3502	5957	835	3502	2613	864	3502	2811	691
Capacity Analysis Module:												
Vol/Sat:	0.04	0.31	0.31	0.06	0.42	0.42	0.08	0.14	0.14	0.11	0.18	0.18
Crit Moves:	****				****			****		****		
Green/Cycle:	0.05	0.43	0.43	0.08	0.46	0.46	0.09	0.23	0.23	0.12	0.27	0.27
Volume/Cap:	0.78	0.72	0.72	0.72	0.91	0.91	0.88	0.62	0.62	0.91	0.66	0.66
Delay/Veh:	75.6	29.0	29.0	62.6	34.7	34.7	77.0	42.6	42.6	75.4	41.0	41.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	75.6	29.0	29.0	62.6	34.7	34.7	77.0	42.6	42.6	75.4	41.0	41.0
LOS by Move:	E	C	C	E	C	C	E	D	D	E	D	D
HCM2kAvgQ:	4	18	18	5	31	31	8	9	9	11	11	11

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #24 Beach Boulevard at McFadden Avenue

Cycle (sec):	120	Critical Vol./Cap.(X):	0.830
Loss Time (sec):	16	Average Delay (sec/veh):	39.9
Optimal Cycle:	101	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	6	28	28	6	28	28	6	28	28	6	28	28
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3	1 0	2 0	3	1 0	2 0	1	1 0	2 0	1	1 0
Volume Module:												
Base Vol:	129	1864	144	190	2377	354	270	359	118	373	478	115
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	129	1864	144	190	2377	354	270	359	118	373	478	115
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	129	1864	144	190	2377	354	270	359	118	373	478	115
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	136	1962	152	200	2502	373	284	378	124	393	503	121
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	136	1962	152	200	2502	373	284	378	124	393	503	121
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	136	1962	152	200	2502	373	284	378	124	393	503	121
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.90	0.90	0.92	0.89	0.89	0.92	0.91	0.91	0.92	0.92	0.92
Lanes:	2.00	3.71	0.29	2.00	3.48	0.52	2.00	1.51	0.49	2.00	1.61	0.39
Final Sat.:	3502	6349	491	3502	5905	879	3502	2616	860	3502	2826	680
Capacity Analysis Module:												
Vol/Sat:	0.04	0.31	0.31	0.06	0.42	0.42	0.08	0.14	0.14	0.11	0.18	0.18
Crit Moves:	****				****			****		****		
Green/Cycle:	0.05	0.43	0.43	0.08	0.46	0.46	0.09	0.23	0.23	0.12	0.26	0.26
Volume/Cap:	0.78	0.72	0.72	0.72	0.92	0.92	0.88	0.62	0.62	0.92	0.68	0.68
Delay/Veh:	75.6	28.9	28.9	62.5	35.2	35.2	77.9	42.7	42.7	76.8	41.6	41.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	75.6	28.9	28.9	62.5	35.2	35.2	77.9	42.7	42.7	76.8	41.6	41.6
LOS by Move:	E	C	C	E	D	D	E	D	D	E	D	D
HCM2kAvgQ:	4	18	18	5	31	31	8	9	9	11	12	12

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #24 Beach Boulevard at McFadden Avenue

Cycle (sec):	120	Critical Vol./Cap.(X):	0.842
Loss Time (sec):	16	Average Delay (sec/veh):	40.0
Optimal Cycle:	105	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	6	28	28	6	28	28	6	28	28	6	28	28
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3	1 0	2 0	3	1 0	2 0	1	1 0	2 0	1	1 0
Volume Module:												
Base Vol:	152	2426	286	179	1600	187	318	392	133	324	307	118
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	152	2426	286	179	1600	187	318	392	133	324	307	118
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	152	2426	286	179	1600	187	318	392	133	324	307	118
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	160	2554	301	188	1684	197	335	413	140	341	323	124
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	2554	301	188	1684	197	335	413	140	341	323	124
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	160	2554	301	188	1684	197	335	413	140	341	323	124
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.90	0.90	0.92	0.90	0.90	0.92	0.91	0.91	0.92	0.91	0.91
Lanes:	2.00	3.58	0.42	2.00	3.58	0.42	2.00	1.49	0.51	2.00	1.44	0.56
Final Sat.:	3502	6088	718	3502	6093	712	3502	2593	880	3502	2498	960
Capacity Analysis Module:												
Vol/Sat:	0.05	0.42	0.42	0.05	0.28	0.28	0.10	0.16	0.16	0.10	0.13	0.13
Crit Moves:		****		****				****		****		
Green/Cycle:	0.08	0.47	0.47	0.06	0.44	0.44	0.10	0.23	0.23	0.11	0.24	0.24
Volume/Cap:	0.57	0.90	0.90	0.90	0.62	0.62	0.96	0.68	0.68	0.90	0.53	0.53
Delay/Veh:	55.9	33.5	33.5	92.4	26.0	26.0	92.3	44.3	44.3	76.7	40.2	40.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	55.9	33.5	33.5	92.4	26.0	26.0	92.3	44.3	44.3	76.7	40.2	40.2
LOS by Move:	E	C	C	F	C	C	F	D	D	E	D	D
HCM2kAvgQ:	4	30	30	6	15	15	10	11	11	9	8	8

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #24 Beach Boulevard at McFadden Avenue

Cycle (sec):	120	Critical Vol./Cap.(X):	0.847
Loss Time (sec):	16	Average Delay (sec/veh):	40.6
Optimal Cycle:	107	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	6	28	28	6	28	28	6	28	28	6	28	28
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3	1 0	2 0	3	1 0	2 0	1	1 0	2 0	1	1 0
Volume Module:												
Base Vol:	152	2426	286	179	1600	214	344	406	133	324	321	118
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	152	2426	286	179	1600	214	344	406	133	324	321	118
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	152	2426	286	179	1600	214	344	406	133	324	321	118
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	160	2554	301	188	1684	225	362	427	140	341	338	124
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	2554	301	188	1684	225	362	427	140	341	338	124
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	160	2554	301	188	1684	225	362	427	140	341	338	124
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.90	0.90	0.92	0.89	0.89	0.92	0.91	0.91	0.92	0.91	0.91
Lanes:	2.00	3.58	0.42	2.00	3.53	0.47	2.00	1.51	0.49	2.00	1.46	0.54
Final Sat.:	3502	6088	718	3502	5990	801	3502	2619	858	3502	2534	932
Capacity Analysis Module:												
Vol/Sat:	0.05	0.42	0.42	0.05	0.28	0.28	0.10	0.16	0.16	0.10	0.13	0.13
Crit Moves:		****		****				****		****		
Green/Cycle:	0.08	0.47	0.47	0.06	0.45	0.45	0.10	0.23	0.23	0.11	0.24	0.24
Volume/Cap:	0.58	0.90	0.90	0.90	0.63	0.63	0.99	0.70	0.70	0.90	0.56	0.56
Delay/Veh:	56.3	33.5	33.5	92.4	26.1	26.1	96.8	44.9	44.9	76.7	41.3	41.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	56.3	33.5	33.5	92.4	26.1	26.1	96.8	44.9	44.9	76.7	41.3	41.3
LOS by Move:	E	C	C	F	C	C	F	D	D	E	D	D
HCM2kAvgQ:	4	30	30	6	15	15	11	11	11	9	8	8

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #25 Beach Boulevard at Center Avenue

Cycle (sec):	90	Critical Vol./Cap.(X):	0.652
Loss Time (sec):	8	Average Delay (sec/veh):	10.7
Optimal Cycle:	42	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	6	0	0	27	27	6	0	6	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4	0 0	0 0	4	0 1	2 0	0	0 2	0 0	0	0 0
Volume Module:												
Base Vol:	0	1978	0	0	2841	850	77	0	436	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1978	0	0	2841	850	77	0	436	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1978	0	0	2841	850	77	0	436	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.00	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	2082	0	0	2991	0	81	0	459	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2082	0	0	2991	0	81	0	459	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2082	0	0	2991	0	81	0	459	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	1.00	1.00	0.91	1.00	0.92	1.00	0.75	1.00	1.00	1.00
Lanes:	0.00	4.00	0.00	0.00	4.00	1.00	2.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	0	6916	0	0	6916	1900	3502	0	2842	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.30	0.00	0.00	0.43	0.00	0.02	0.00	0.16	0.00	0.00	0.00
Crit Moves:					****				****			
Green/Cycle:	0.00	0.66	0.00	0.00	0.66	0.00	0.25	0.00	0.25	0.00	0.00	0.00
Volume/Cap:	0.00	0.45	0.00	0.00	0.65	0.00	0.09	0.00	0.65	0.00	0.00	0.00
Delay/Veh:	0.0	7.4	0.0	0.0	9.3	0.0	26.1	0.0	32.6	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	7.4	0.0	0.0	9.3	0.0	26.1	0.0	32.6	0.0	0.0	0.0
LOS by Move:	A	A	A	A	A	A	C	A	C	A	A	A
HCM2kAvgQ:	0	8	0	0	14	0	1	0	8	0	0	0

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #25 Beach Boulevard at Center Avenue

Cycle (sec):	90	Critical Vol./Cap.(X):	0.656
Loss Time (sec):	8	Average Delay (sec/veh):	10.7
Optimal Cycle:	43	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	6	0	0	27	27	6	0	6	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4	0 0	0 0	4	0 1	2 0	0	0 2	0 0	0	0 0
Volume Module:												
Base Vol:	0	1978	0	0	2869	871	79	0	436	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1978	0	0	2869	871	79	0	436	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1978	0	0	2869	871	79	0	436	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.00	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	2082	0	0	3020	0	83	0	459	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2082	0	0	3020	0	83	0	459	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2082	0	0	3020	0	83	0	459	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	1.00	1.00	0.91	1.00	0.92	1.00	0.75	1.00	1.00	1.00
Lanes:	0.00	4.00	0.00	0.00	4.00	1.00	2.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	0	6916	0	0	6916	1900	3502	0	2842	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.30	0.00	0.00	0.44	0.00	0.02	0.00	0.16	0.00	0.00	0.00
Crit Moves:					****				****			
Green/Cycle:	0.00	0.67	0.00	0.00	0.67	0.00	0.25	0.00	0.25	0.00	0.00	0.00
Volume/Cap:	0.00	0.45	0.00	0.00	0.66	0.00	0.10	0.00	0.66	0.00	0.00	0.00
Delay/Veh:	0.0	7.3	0.0	0.0	9.3	0.0	26.3	0.0	32.8	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	7.3	0.0	0.0	9.3	0.0	26.3	0.0	32.8	0.0	0.0	0.0
LOS by Move:	A	A	A	A	A	A	C	A	C	A	A	A
HCM2kAvgQ:	0	8	0	0	14	0	1	0	8	0	0	0

Note: Queue reported is the number of cars per lane.

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PM Existing
2.13.3396.2 Goldenwest College
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #25 Beach Boulevard at Center Avenue

Cycle (sec):	90	Critical Vol./Cap.(X):	0.810
Loss Time (sec):	8	Average Delay (sec/veh):	21.9
Optimal Cycle:	66	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	6	0	0	27	27	6	0	6	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 0	0	0 0	4 0	1	2 0	0 0	2	0 0	0 0	0
Volume Module:												
Base Vol:	0	2460	0	0	2218	948	284	0	983	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2460	0	0	2218	948	284	0	983	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	2460	0	0	2218	948	284	0	983	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.00	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	2589	0	0	2335	0	299	0	1035	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2589	0	0	2335	0	299	0	1035	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2589	0	0	2335	0	299	0	1035	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	1.00	1.00	0.91	1.00	0.92	1.00	0.75	1.00	1.00	1.00
Lanes:	0.00	4.00	0.00	0.00	4.00	1.00	2.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	0	6916	0	0	6916	1900	3502	0	2842	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.37	0.00	0.00	0.34	0.00	0.09	0.00	0.36	0.00	0.00	0.00
Crit Moves:		****							****			
Green/Cycle:	0.00	0.46	0.00	0.00	0.46	0.00	0.45	0.00	0.45	0.00	0.00	0.00
Volume/Cap:	0.00	0.81	0.00	0.00	0.73	0.00	0.19	0.00	0.81	0.00	0.00	0.00
Delay/Veh:	0.0	22.5	0.0	0.0	20.6	0.0	15.0	0.0	25.5	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	22.5	0.0	0.0	20.6	0.0	15.0	0.0	25.5	0.0	0.0	0.0
LOS by Move:	A	C	A	A	C	A	B	A	C	A	A	A
HCM2kAvgQ:	0	19	0	0	16	0	3	0	16	0	0	0

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #25 Beach Boulevard at Center Avenue

Cycle (sec):	90	Critical Vol./Cap.(X):	0.810
Loss Time (sec):	8	Average Delay (sec/veh):	21.9
Optimal Cycle:	66	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	6	0	0	27	27	6	0	6	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4	0 0	0 0	4	0 1	2 0	0	0 2	0 0	0	0 0
Volume Module:												
Base Vol:	0	2460	0	0	2238	982	292	0	983	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2460	0	0	2238	982	292	0	983	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	2460	0	0	2238	982	292	0	983	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.00	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	2589	0	0	2356	0	307	0	1035	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2589	0	0	2356	0	307	0	1035	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2589	0	0	2356	0	307	0	1035	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	1.00	1.00	0.91	1.00	0.92	1.00	0.75	1.00	1.00	1.00
Lanes:	0.00	4.00	0.00	0.00	4.00	1.00	2.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	0	6916	0	0	6916	1900	3502	0	2842	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.37	0.00	0.00	0.34	0.00	0.09	0.00	0.36	0.00	0.00	0.00
Crit Moves:		****							****			
Green/Cycle:	0.00	0.46	0.00	0.00	0.46	0.00	0.45	0.00	0.45	0.00	0.00	0.00
Volume/Cap:	0.00	0.81	0.00	0.00	0.74	0.00	0.20	0.00	0.81	0.00	0.00	0.00
Delay/Veh:	0.0	22.5	0.0	0.0	20.7	0.0	15.0	0.0	25.5	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	22.5	0.0	0.0	20.7	0.0	15.0	0.0	25.5	0.0	0.0	0.0
LOS by Move:	A	C	A	A	C	A	B	A	C	A	A	A
HCM2kAvgQ:	0	19	0	0	16	0	3	0	16	0	0	0

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #26 Beach Boulevard at Edinger Avenue

Cycle (sec):	115	Critical Vol./Cap.(X):	0.768
Loss Time (sec):	16	Average Delay (sec/veh):	35.6
Optimal Cycle:	99	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	6	35	35	6	38	38	6	28	28	6	33	33
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	4 0	2	2 0	3 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	113	1499	259	430	2284	522	193	765	110	121	492	260
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	113	1499	259	430	2284	522	193	765	110	121	492	260
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	113	1499	259	430	2284	522	193	765	110	121	492	260
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	119	1578	273	453	2404	549	203	805	116	127	518	274
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	119	1578	273	453	2404	549	203	805	116	127	518	274
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	119	1578	273	453	2404	549	203	805	116	127	518	274
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.91	0.85	0.92	0.91	0.75	0.92	0.91	0.85	0.92	0.95	0.85
Lanes:	2.00	3.00	1.00	2.00	4.00	2.00	2.00	3.00	1.00	2.00	2.00	1.00
Final Sat.:	3502	5187	1615	3502	6916	2842	3502	5187	1615	3502	3610	1615
Capacity Analysis Module:												
Vol/Sat:	0.03	0.30	0.17	0.13	0.35	0.19	0.06	0.16	0.07	0.04	0.14	0.17
Crit Moves:		****		****			****					****
Green/Cycle:	0.07	0.36	0.36	0.15	0.44	0.51	0.07	0.29	0.36	0.06	0.29	0.29
Volume/Cap:	0.51	0.86	0.48	0.86	0.79	0.38	0.86	0.53	0.20	0.58	0.50	0.59
Delay/Veh:	53.9	38.6	29.4	60.6	29.1	17.4	78.1	34.5	25.7	56.3	34.5	37.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	53.9	38.6	29.4	60.6	29.1	17.4	78.1	34.5	25.7	56.3	34.5	37.2
LOS by Move:	D	D	C	E	C	B	E	C	C	E	C	D
HCM2kAvgQ:	3	21	8	11	21	7	6	9	3	3	8	9

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #26 Beach Boulevard at Edinger Avenue

Cycle (sec):	115	Critical Vol./Cap.(X):	0.768
Loss Time (sec):	16	Average Delay (sec/veh):	35.6
Optimal Cycle:	99	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	6	35	35	6	38	38	6	28	28	6	33	33
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	4 0	2	2 0	3 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	129	1499	259	430	2284	550	193	776	114	121	503	260
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	129	1499	259	430	2284	550	193	776	114	121	503	260
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	129	1499	259	430	2284	550	193	776	114	121	503	260
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	136	1578	273	453	2404	579	203	817	120	127	529	274
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	136	1578	273	453	2404	579	203	817	120	127	529	274
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	136	1578	273	453	2404	579	203	817	120	127	529	274
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.91	0.85	0.92	0.91	0.75	0.92	0.91	0.85	0.92	0.95	0.85
Lanes:	2.00	3.00	1.00	2.00	4.00	2.00	2.00	3.00	1.00	2.00	2.00	1.00
Final Sat.:	3502	5187	1615	3502	6916	2842	3502	5187	1615	3502	3610	1615
Capacity Analysis Module:												
Vol/Sat:	0.04	0.30	0.17	0.13	0.35	0.20	0.06	0.16	0.07	0.04	0.15	0.17
Crit Moves:		****		****			****					****
Green/Cycle:	0.07	0.36	0.36	0.15	0.44	0.51	0.07	0.29	0.36	0.06	0.29	0.29
Volume/Cap:	0.59	0.86	0.48	0.86	0.79	0.40	0.86	0.54	0.21	0.58	0.51	0.59
Delay/Veh:	56.1	38.6	29.4	60.6	29.1	17.7	78.1	34.6	25.8	56.3	34.7	37.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	56.1	38.6	29.4	60.6	29.1	17.7	78.1	34.6	25.8	56.3	34.7	37.2
LOS by Move:	E	D	C	E	C	B	E	C	C	E	C	D
HCM2kAvgQ:	3	21	8	11	21	7	6	9	3	3	8	9

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #26 Beach Boulevard at Edinger Avenue

Cycle (sec):	120	Critical Vol./Cap.(X):	0.867
Loss Time (sec):	16	Average Delay (sec/veh):	45.5
Optimal Cycle:	114	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	6	35	35	6	38	38	6	28	28	6	33	33
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	4 0	2	2 0	3 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	321	1854	494	346	2266	549	291	718	225	261	631	213
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	321	1854	494	346	2266	549	291	718	225	261	631	213
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	321	1854	494	346	2266	549	291	718	225	261	631	213
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	338	1952	520	364	2385	578	306	756	237	275	664	224
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	338	1952	520	364	2385	578	306	756	237	275	664	224
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	338	1952	520	364	2385	578	306	756	237	275	664	224
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.91	0.85	0.92	0.91	0.75	0.92	0.91	0.85	0.92	0.95	0.85
Lanes:	2.00	3.00	1.00	2.00	4.00	2.00	2.00	3.00	1.00	2.00	2.00	1.00
Final Sat.:	3502	5187	1615	3502	6916	2842	3502	5187	1615	3502	3610	1615
Capacity Analysis Module:												
Vol/Sat:	0.10	0.38	0.32	0.10	0.34	0.20	0.09	0.15	0.15	0.08	0.18	0.14
Crit Moves:		****		****			****				****	
Green/Cycle:	0.11	0.39	0.39	0.11	0.39	0.48	0.09	0.27	0.38	0.09	0.28	0.28
Volume/Cap:	0.88	0.96	0.82	0.96	0.88	0.42	0.96	0.53	0.38	0.85	0.67	0.50
Delay/Veh:	73.2	47.4	41.1	88.8	37.7	20.4	93.8	37.4	27.1	72.7	40.4	37.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	73.2	47.4	41.1	88.8	37.7	20.4	93.8	37.4	27.1	72.7	40.4	37.6
LOS by Move:	E	D	D	F	D	C	F	D	C	E	D	D
HCM2kAvgQ:	9	31	19	11	25	8	9	9	6	8	12	7

Note: Queue reported is the number of cars per lane.

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PM Existing Plus Project
2.13.3396.2 Goldenwest College
Caltrans

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #26 Beach Boulevard at Edinger Avenue

Cycle (sec):	120	Critical Vol./Cap.(X):	0.875
Loss Time (sec):	16	Average Delay (sec/veh):	46.2
Optimal Cycle:	118	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	6	35	35	6	38	38	6	28	28	6	33	33
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	4 0	2	2 0	3 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	353	1854	494	346	2266	569	291	763	255	261	655	213
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	353	1854	494	346	2266	569	291	763	255	261	655	213
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	353	1854	494	346	2266	569	291	763	255	261	655	213
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	372	1952	520	364	2385	599	306	803	268	275	689	224
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	372	1952	520	364	2385	599	306	803	268	275	689	224
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	372	1952	520	364	2385	599	306	803	268	275	689	224
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.91	0.85	0.92	0.91	0.75	0.92	0.91	0.85	0.92	0.95	0.85
Lanes:	2.00	3.00	1.00	2.00	4.00	2.00	2.00	3.00	1.00	2.00	2.00	1.00
Final Sat.:	3502	5187	1615	3502	6916	2842	3502	5187	1615	3502	3610	1615
Capacity Analysis Module:												
Vol/Sat:	0.11	0.38	0.32	0.10	0.34	0.21	0.09	0.15	0.17	0.08	0.19	0.14
Crit Moves:		****		****			****				****	
Green/Cycle:	0.12	0.39	0.39	0.11	0.38	0.47	0.09	0.27	0.39	0.09	0.28	0.28
Volume/Cap:	0.90	0.96	0.82	0.96	0.90	0.44	0.96	0.57	0.42	0.85	0.69	0.50
Delay/Veh:	74.5	47.4	41.1	88.8	39.6	21.3	93.8	37.9	27.1	72.7	41.1	37.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	74.5	47.4	41.1	88.8	39.6	21.3	93.8	37.9	27.1	72.7	41.1	37.6
LOS by Move:	E	D	D	F	D	C	F	D	C	E	D	D
HCM2kAvgQ:	10	31	19	11	26	8	9	10	7	8	13	7

Note: Queue reported is the number of cars per lane.

Traffix 8.0.0715 (c) 2008 Dowling Assoc. Licensed to LLG Costa Mesa, CA

APPENDIX F-II

YEAR 2024 PLUS PROJECT TRAFFIC CONDITIONS

AM Cum
2.13.3396.2 Goldenwest College
Caltrans

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Goldenwest Street at I-405 SB Ramps

Cycle (sec):	90	Critical Vol./Cap.(X):	0.555
Loss Time (sec):	8	Average Delay (sec/veh):	14.5
Optimal Cycle:	35	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	6	0	0	6	6	6	6	6	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3	0 0	0 0	2	0 1	1 0	1!	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	0	1623	0	0	999	363	387	0	438	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1623	0	0	999	363	387	0	438	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1623	0	0	999	363	387	0	438	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.00	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	1708	0	0	1052	0	407	0	461	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1708	0	0	1052	0	407	0	461	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1708	0	0	1052	0	407	0	461	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	1.00	1.00	0.95	1.00	0.90	1.00	0.90	1.00	1.00	1.00
Lanes:	0.00	3.00	0.00	0.00	2.00	1.00	1.47	0.00	1.53	0.00	0.00	0.00
Final Sat.:	0	5187	0	0	3610	1900	2509	0	2614	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.33	0.00	0.00	0.29	0.00	0.16	0.00	0.18	0.00	0.00	0.00
Crit Moves:		****							****			
Green/Cycle:	0.00	0.59	0.00	0.00	0.59	0.00	0.32	0.00	0.32	0.00	0.00	0.00
Volume/Cap:	0.00	0.56	0.00	0.00	0.49	0.00	0.51	0.00	0.56	0.00	0.00	0.00
Delay/Veh:	0.0	11.3	0.0	0.0	10.7	0.0	25.3	0.0	25.9	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	11.3	0.0	0.0	10.7	0.0	25.3	0.0	25.9	0.0	0.0	0.0
LOS by Move:	A	B	A	A	B	A	C	A	C	A	A	A
HCM2kAvgQ:	0	11	0	0	9	0	7	0	7	0	0	0

Note: Queue reported is the number of cars per lane.

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AM Cum Plus Project
2.13.3396.2 Goldenwest College
Caltrans

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

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Intersection #3 Goldenwest Street at I-405 SB Ramps

****

Cycle (sec):	90	Critical Vol./Cap.(X):	0.569	
Loss Time (sec):	8	Average Delay (sec/veh):	15.0	
Optimal Cycle:	36	Level Of Service:	B	

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	6	0	0	6	6	6	6	6	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3	0 0	0 0	2	0 1	1 0	1!	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	0	1634	0	0	1011	363	387	0	468	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1634	0	0	1011	363	387	0	468	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1634	0	0	1011	363	387	0	468	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.00	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	1720	0	0	1064	0	407	0	493	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1720	0	0	1064	0	407	0	493	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1720	0	0	1064	0	407	0	493	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	1.00	1.00	0.95	1.00	0.90	1.00	0.90	1.00	1.00	1.00
Lanes:	0.00	3.00	0.00	0.00	2.00	1.00	1.45	0.00	1.55	0.00	0.00	0.00
Final Sat.:	0	5187	0	0	3610	1900	2478	0	2640	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.33	0.00	0.00	0.29	0.00	0.16	0.00	0.19	0.00	0.00	0.00
Crit Moves:		****							****			
Green/Cycle:	0.00	0.58	0.00	0.00	0.58	0.00	0.33	0.00	0.33	0.00	0.00	0.00
Volume/Cap:	0.00	0.57	0.00	0.00	0.51	0.00	0.50	0.00	0.57	0.00	0.00	0.00
Delay/Veh:	0.0	12.0	0.0	0.0	11.3	0.0	24.5	0.0	25.5	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	12.0	0.0	0.0	11.3	0.0	24.5	0.0	25.5	0.0	0.0	0.0
LOS by Move:	A	B	A	A	B	A	C	A	C	A	A	A
HCM2kAvgQ:	0	11	0	0	9	0	7	0	8	0	0	0

****

Note: Queue reported is the number of cars per lane.

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Caltrans

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Goldenwest Street at I-405 SB Ramps

Cycle (sec):	90	Critical Vol./Cap.(X):	0.799
Loss Time (sec):	8	Average Delay (sec/veh):	16.4
Optimal Cycle:	63	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	6	0	0	6	6	6	6	6	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3	0 0	0 0	2	0 1	1 0	1!	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	0	2487	0	0	1028	573	340	0	584	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2487	0	0	1028	573	340	0	584	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	2487	0	0	1028	573	340	0	584	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.00	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	2618	0	0	1082	0	358	0	615	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2618	0	0	1082	0	358	0	615	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2618	0	0	1082	0	358	0	615	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	1.00	1.00	0.95	1.00	0.89	1.00	0.89	1.00	1.00	1.00
Lanes:	0.00	3.00	0.00	0.00	2.00	1.00	1.37	0.00	1.63	0.00	0.00	0.00
Final Sat.:	0	5187	0	0	3610	1900	2310	0	2756	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.50	0.00	0.00	0.30	0.00	0.15	0.00	0.22	0.00	0.00	0.00
Crit Moves:		****							****			
Green/Cycle:	0.00	0.63	0.00	0.00	0.63	0.00	0.28	0.00	0.28	0.00	0.00	0.00
Volume/Cap:	0.00	0.80	0.00	0.00	0.47	0.00	0.55	0.00	0.80	0.00	0.00	0.00
Delay/Veh:	0.0	13.8	0.0	0.0	8.9	0.0	28.1	0.0	33.9	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	13.8	0.0	0.0	8.9	0.0	28.1	0.0	33.9	0.0	0.0	0.0
LOS by Move:	A	B	A	A	A	A	C	A	C	A	A	A
HCM2kAvgQ:	0	21	0	0	8	0	7	0	12	0	0	0

Note: Queue reported is the number of cars per lane.

PM Cum Plus Project
2.13.3396.2 Goldenwest College
Caltrans

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

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Intersection #3 Goldenwest Street at I-405 SB Ramps

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Cycle (sec):	90	Critical Vol./Cap.(X):	0.822
Loss Time (sec):	8	Average Delay (sec/veh):	17.2
Optimal Cycle:	69	Level Of Service:	B

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	6	0	0	6	6	6	6	6	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	3	0 0	0 0	2	0 1	1 0	1!	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	0	2536	0	0	1043	573	340	0	618	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2536	0	0	1043	573	340	0	618	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	2536	0	0	1043	573	340	0	618	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.00	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	2669	0	0	1098	0	358	0	651	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2669	0	0	1098	0	358	0	651	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2669	0	0	1098	0	358	0	651	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	1.00	1.00	0.95	1.00	0.89	1.00	0.89	1.00	1.00	1.00
Lanes:	0.00	3.00	0.00	0.00	2.00	1.00	1.35	0.00	1.65	0.00	0.00	0.00
Final Sat.:	0	5187	0	0	3610	1900	2285	0	2775	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.51	0.00	0.00	0.30	0.00	0.16	0.00	0.23	0.00	0.00	0.00
Crit Moves:		****							****			
Green/Cycle:	0.00	0.63	0.00	0.00	0.63	0.00	0.29	0.00	0.29	0.00	0.00	0.00
Volume/Cap:	0.00	0.82	0.00	0.00	0.49	0.00	0.55	0.00	0.82	0.00	0.00	0.00
Delay/Veh:	0.0	14.8	0.0	0.0	9.2	0.0	27.6	0.0	34.6	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	14.8	0.0	0.0	9.2	0.0	27.6	0.0	34.6	0.0	0.0	0.0
LOS by Move:	A	B	A	A	A	A	C	A	C	A	A	A
HCM2kAvgQ:	0	23	0	0	9	0	7	0	13	0	0	0

****

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #23 I-405 SB Ramps at Center Avenue

Cycle (sec):	90	Critical Vol./Cap.(X):	0.704
Loss Time (sec):	12	Average Delay (sec/veh):	21.6
Optimal Cycle:	58	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Permitted		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	6	0	6	6	6	0	0	6	6
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 0	2	0 0	0 1	1	0 2	0 0	0	0 2	0 1
Volume Module:												
Base Vol:	0	0	0	548	0	93	132	291	0	0	489	565
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	548	0	93	132	291	0	0	489	565
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	548	0	93	132	291	0	0	489	565
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	577	0	98	139	306	0	0	515	595
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	577	0	98	139	306	0	0	515	595
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	577	0	98	139	306	0	0	515	595
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.92	1.00	0.85	0.95	0.95	1.00	1.00	0.95	0.85
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	3502	0	1615	1805	3610	0	0	3610	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.16	0.00	0.06	0.08	0.08	0.00	0.00	0.14	0.37
Crit Moves:				****			****					****
Green/Cycle:	0.00	0.00	0.00	0.23	0.00	0.34	0.11	0.63	0.00	0.00	0.52	0.52
Volume/Cap:	0.00	0.00	0.00	0.70	0.00	0.18	0.70	0.13	0.00	0.00	0.27	0.70
Delay/Veh:	0.0	0.0	0.0	34.4	0.0	20.8	49.6	6.7	0.0	0.0	12.0	18.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	34.4	0.0	20.8	49.6	6.7	0.0	0.0	12.0	18.9
LOS by Move:	A	A	A	C	A	C	D	A	A	A	B	B
HCM2kAvgQ:	0	0	0	9	0	2	5	2	0	0	4	13

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #23 I-405 SB Ramps at Center Avenue

Cycle (sec):	90	Critical Vol./Cap.(X):	0.708
Loss Time (sec):	12	Average Delay (sec/veh):	21.8
Optimal Cycle:	59	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Permitted		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	6	0	6	6	6	0	0	6	6
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	2	0	1	1	0	2	0	2	1
Volume Module:												
Base Vol:	0	0	0	548	0	102	138	293	0	0	510	565
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	548	0	102	138	293	0	0	510	565
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	548	0	102	138	293	0	0	510	565
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	577	0	107	145	308	0	0	537	595
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	577	0	107	145	308	0	0	537	595
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	577	0	107	145	308	0	0	537	595
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.92	1.00	0.85	0.95	0.95	1.00	1.00	0.95	0.85
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	3502	0	1615	1805	3610	0	0	3610	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.16	0.00	0.07	0.08	0.09	0.00	0.00	0.15	0.37
Crit Moves:				****			****					****
Green/Cycle:	0.00	0.00	0.00	0.23	0.00	0.35	0.11	0.63	0.00	0.00	0.52	0.52
Volume/Cap:	0.00	0.00	0.00	0.71	0.00	0.19	0.71	0.13	0.00	0.00	0.29	0.71
Delay/Veh:	0.0	0.0	0.0	34.6	0.0	20.8	49.3	6.6	0.0	0.0	12.2	19.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	34.6	0.0	20.8	49.3	6.6	0.0	0.0	12.2	19.2
LOS by Move:	A	A	A	C	A	C	D	A	A	A	B	B
HCM2kAvgQ:	0	0	0	9	0	2	5	2	0	0	4	14

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #23 I-405 SB Ramps at Center Avenue

Cycle (sec):	90	Critical Vol./Cap.(X):	0.518
Loss Time (sec):	12	Average Delay (sec/veh):	17.1
Optimal Cycle:	41	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Permitted		
Rights:	Include			Ovl			Include			Ovl		
Min. Green:	0	0	0	6	0	6	6	6	0	0	6	6
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 0	2	0 0	0 1	1	0 2	0 0	0	0 2	0 1
Volume Module:												
Base Vol:	0	0	0	548	0	102	138	293	0	0	510	565
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	548	0	102	138	293	0	0	510	565
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	548	0	102	138	293	0	0	510	565
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	577	0	107	145	308	0	0	537	595
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	577	0	107	145	308	0	0	537	595
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	577	0	107	145	308	0	0	537	595
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.92	1.00	0.85	0.95	0.95	1.00	1.00	0.95	0.85
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	3502	0	1615	1805	3610	0	0	3610	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.16	0.00	0.07	0.08	0.09	0.00	0.00	0.15	0.37
Crit Moves:				****			****					****
Green/Cycle:	0.00	0.00	0.00	0.32	0.00	0.47	0.16	0.55	0.00	0.00	0.39	0.71
Volume/Cap:	0.00	0.00	0.00	0.52	0.00	0.14	0.52	0.16	0.00	0.00	0.38	0.52
Delay/Veh:	0.0	0.0	0.0	25.5	0.0	13.4	36.6	10.1	0.0	0.0	19.6	6.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	25.5	0.0	13.4	36.6	10.1	0.0	0.0	19.6	6.4
LOS by Move:	A	A	A	C	A	B	D	B	A	A	B	A
HCM2kAvgQ:	0	0	0	7	0	2	4	2	0	0	6	8

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #23 I-405 SB Ramps at Center Avenue

Cycle (sec):	120	Critical Vol./Cap.(X):	1.114
Loss Time (sec):	12	Average Delay (sec/veh):	70.5
Optimal Cycle:	180	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Permitted		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	6	0	6	6	6	0	0	6	6
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0	0 0	2	0 0	0 1	1	0 2	0 0	0	0 2	0 1
Volume Module:												
Base Vol:	0	0	0	871	0	397	521	707	0	0	556	671
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	871	0	397	521	707	0	0	556	671
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	871	0	397	521	707	0	0	556	671
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	917	0	418	548	744	0	0	585	706
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	917	0	418	548	744	0	0	585	706
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	917	0	418	548	744	0	0	585	706
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.92	1.00	0.85	0.95	0.95	1.00	1.00	0.95	0.85
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	3502	0	1615	1805	3610	0	0	3610	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.26	0.00	0.26	0.30	0.21	0.00	0.00	0.16	0.44
Crit Moves:				****			****					****
Green/Cycle:	0.00	0.00	0.00	0.23	0.00	0.51	0.27	0.67	0.00	0.00	0.39	0.39
Volume/Cap:	0.00	0.00	0.00	1.11	0.00	0.51	1.11	0.31	0.00	0.00	0.41	1.11
Delay/Veh:	0.0	0.0	0.0	113.7	0.0	20.2	119.4	8.6	0.0	0.0	26.6	107.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	113.7	0.0	20.2	119.4	8.6	0.0	0.0	26.6	107.9
LOS by Move:	A	A	A	F	A	C	F	A	A	A	C	F
HCM2kAvgQ:	0	0	0	27	0	10	31	6	0	0	8	39

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #23 I-405 SB Ramps at Center Avenue

Cycle (sec):	120	Critical Vol./Cap.(X):	1.137
Loss Time (sec):	12	Average Delay (sec/veh):	74.4
Optimal Cycle:	180	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Permitted		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	6	0	6	6	6	0	0	6	6
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	2	0	1	1	0	2	0	2	1
Volume Module:												
Base Vol:	0	0	0	871	0	404	553	715	0	0	590	671
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	871	0	404	553	715	0	0	590	671
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	871	0	404	553	715	0	0	590	671
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	917	0	425	582	753	0	0	621	706
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	917	0	425	582	753	0	0	621	706
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	917	0	425	582	753	0	0	621	706
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.92	1.00	0.85	0.95	0.95	1.00	1.00	0.95	0.85
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	3502	0	1615	1805	3610	0	0	3610	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.26	0.00	0.26	0.32	0.21	0.00	0.00	0.17	0.44
Crit Moves:						****	****					****
Green/Cycle:	0.00	0.00	0.00	0.23	0.00	0.52	0.28	0.67	0.00	0.00	0.38	0.38
Volume/Cap:	0.00	0.00	0.00	1.13	0.00	0.51	1.14	0.31	0.00	0.00	0.45	1.14
Delay/Veh:	0.0	0.0	0.0	120.1	0.0	19.7	126.1	8.4	0.0	0.0	27.7	117.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	120.1	0.0	19.7	126.1	8.4	0.0	0.0	27.7	117.0
LOS by Move:	A	A	A	F	A	B	F	A	A	A	C	F
HCM2kAvgQ:	0	0	0	28	0	10	33	6	0	0	9	40

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #23 I-405 SB Ramps at Center Avenue

Cycle (sec):	90	Critical Vol./Cap.(X):	0.878
Loss Time (sec):	12	Average Delay (sec/veh):	29.6
Optimal Cycle:	96	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Permitted		
Rights:	Include			Ovl			Include			Ovl		
Min. Green:	0	0	0	6	0	6	6	6	0	0	6	6
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	2	0	1	1	0	2	0	2	1
Volume Module:												
Base Vol:	0	0	0	871	0	404	553	715	0	0	590	671
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	871	0	404	553	715	0	0	590	671
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	871	0	404	553	715	0	0	590	671
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	917	0	425	582	753	0	0	621	706
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	917	0	425	582	753	0	0	621	706
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	917	0	425	582	753	0	0	621	706
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.92	1.00	0.85	0.95	0.95	1.00	1.00	0.95	0.85
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	3502	0	1615	1805	3610	0	0	3610	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.26	0.00	0.26	0.32	0.21	0.00	0.00	0.17	0.44
Crit Moves:						****	****					****
Green/Cycle:	0.00	0.00	0.00	0.30	0.00	0.67	0.37	0.57	0.00	0.00	0.20	0.50
Volume/Cap:	0.00	0.00	0.00	0.87	0.00	0.39	0.88	0.37	0.00	0.00	0.86	0.88
Delay/Veh:	0.0	0.0	0.0	38.1	0.0	7.0	39.4	10.8	0.0	0.0	45.1	30.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	38.1	0.0	7.0	39.4	10.8	0.0	0.0	45.1	30.6
LOS by Move:	A	A	A	D	A	A	D	B	A	A	D	C
HCM2kAvgQ:	0	0	0	16	0	5	18	6	0	0	12	21

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #24 Beach Boulevard at McFadden Avenue

Cycle (sec):	120	Critical Vol./Cap.(X):	1.021
Loss Time (sec):	16	Average Delay (sec/veh):	71.7
Optimal Cycle:	180	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	6	28	28	6	28	28	6	28	28	6	28	28
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3	1 0	2 0	3	1 0	2 0	1	1 0	2 0	1	1 0
Volume Module:												
Base Vol:	163	2344	206	232	2933	412	354	442	150	458	577	140
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	163	2344	206	232	2933	412	354	442	150	458	577	140
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	163	2344	206	232	2933	412	354	442	150	458	577	140
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	172	2467	217	244	3087	434	373	465	158	482	607	147
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	172	2467	217	244	3087	434	373	465	158	482	607	147
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	172	2467	217	244	3087	434	373	465	158	482	607	147
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.90	0.90	0.92	0.89	0.89	0.92	0.91	0.91	0.92	0.92	0.92
Lanes:	2.00	3.68	0.32	2.00	3.51	0.49	2.00	1.49	0.51	2.00	1.61	0.39
Final Sat.:	3502	6281	552	3502	5955	837	3502	2593	880	3502	2821	684
Capacity Analysis Module:												
Vol/Sat:	0.05	0.39	0.39	0.07	0.52	0.52	0.11	0.18	0.18	0.14	0.22	0.22
Crit Moves:	****				****			****		****		
Green/Cycle:	0.05	0.43	0.43	0.08	0.46	0.46	0.11	0.23	0.23	0.12	0.24	0.24
Volume/Cap:	0.98	0.91	0.91	0.91	1.12	1.12	0.96	0.77	0.77	1.12	0.88	0.88
Delay/Veh:	118.8	36.1	36.1	86.2	93.3	93.3	87.0	47.5	47.5	134.7	54.2	54.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	118.8	36.1	36.1	86.2	93.3	93.3	87.0	47.5	47.5	134.7	54.2	54.2
LOS by Move:	F	D	D	F	F	F	F	D	D	F	D	D
HCM2kAvgQ:	6	29	29	7	52	52	11	13	13	16	17	17

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #24 Beach Boulevard at McFadden Avenue

Cycle (sec): 120 Critical Vol./Cap.(X): 1.026
Loss Time (sec): 16 Average Delay (sec/veh): 73.2
Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	6	28	28	6	28	28	6	28	28	6	28	28
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3	1 0	2 0	3	1 0	2 0	1	1 0	2 0	1	1 0
Volume Module:												
Base Vol:	163	2344	206	232	2933	433	360	444	150	458	587	140
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	163	2344	206	232	2933	433	360	444	150	458	587	140
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	163	2344	206	232	2933	433	360	444	150	458	587	140
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	172	2467	217	244	3087	456	379	467	158	482	618	147
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	172	2467	217	244	3087	456	379	467	158	482	618	147
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	172	2467	217	244	3087	456	379	467	158	482	618	147
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.90	0.90	0.92	0.89	0.89	0.92	0.91	0.91	0.92	0.92	0.92
Lanes:	2.00	3.68	0.32	2.00	3.49	0.51	2.00	1.49	0.51	2.00	1.61	0.39
Final Sat.:	3502	6281	552	3502	5912	873	3502	2596	877	3502	2830	675
Capacity Analysis Module:												
Vol/Sat:	0.05	0.39	0.39	0.07	0.52	0.52	0.11	0.18	0.18	0.14	0.22	0.22
Crit Moves:	****				****			****		****		
Green/Cycle:	0.05	0.43	0.43	0.08	0.46	0.46	0.11	0.23	0.23	0.12	0.24	0.24
Volume/Cap:	0.98	0.90	0.90	0.90	1.13	1.13	0.96	0.77	0.77	1.13	0.90	0.90
Delay/Veh:	118.8	36.0	36.0	85.9	96.0	96.0	88.4	47.6	47.6	137.2	56.6	56.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	118.8	36.0	36.0	85.9	96.0	96.0	88.4	47.6	47.6	137.2	56.6	56.6
LOS by Move:	F	D	D	F	F	F	F	D	D	F	E	E
HCM2kAvgQ:	6	29	29	7	53	53	11	13	13	16	18	18

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #24 Beach Boulevard at McFadden Avenue

Cycle (sec):	120	Critical Vol./Cap.(X):	0.938
Loss Time (sec):	16	Average Delay (sec/veh):	49.5
Optimal Cycle:	152	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	6	28	28	6	28	28	6	28	28	6	28	28
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	163	2344	206	232	2933	433	360	444	150	458	587	140
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	163	2344	206	232	2933	433	360	444	150	458	587	140
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	163	2344	206	232	2933	433	360	444	150	458	587	140
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	172	2467	217	244	3087	456	379	467	158	482	618	147
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	172	2467	217	244	3087	456	379	467	158	482	618	147
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	172	2467	217	244	3087	456	379	467	158	482	618	147
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.91	0.85	0.92	0.91	0.85	0.92	0.91	0.91	0.92	0.92	0.92
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	1.49	0.51	2.00	1.61	0.39
Final Sat.:	3502	6916	1615	3502	6916	1615	3502	2596	877	3502	2830	675
Capacity Analysis Module:												
Vol/Sat:	0.05	0.36	0.13	0.07	0.45	0.28	0.11	0.18	0.18	0.14	0.22	0.22
Crit Moves:	****				****			****		****		
Green/Cycle:	0.05	0.41	0.41	0.08	0.45	0.45	0.12	0.23	0.23	0.14	0.25	0.25
Volume/Cap:	0.98	0.86	0.32	0.86	1.00	0.63	0.92	0.77	0.77	1.00	0.86	0.86
Delay/Veh:	118.8	34.8	24.0	76.8	49.8	27.5	78.2	47.6	47.6	93.1	51.4	51.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	118.8	34.8	24.0	76.8	49.8	27.5	78.2	47.6	47.6	93.1	51.4	51.4
LOS by Move:	F	C	C	E	D	C	E	D	D	F	D	D
HCM2kAvgQ:	6	25	5	7	39	13	10	13	13	14	17	17

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #24 Beach Boulevard at McFadden Avenue

Cycle (sec):	120	Critical Vol./Cap.(X):	1.052
Loss Time (sec):	16	Average Delay (sec/veh):	74.8
Optimal Cycle:	180	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	6	28	28	6	28	28	6	28	28	6	28	28
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3	1 0	2 0	3	1 0	2 0	1	1 0	2 0	1	1 0
Volume Module:												
Base Vol:	187	3026	360	218	2038	257	402	480	164	424	377	144
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	187	3026	360	218	2038	257	402	480	164	424	377	144
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	187	3026	360	218	2038	257	402	480	164	424	377	144
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	197	3185	379	229	2145	271	423	505	173	446	397	152
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	197	3185	379	229	2145	271	423	505	173	446	397	152
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	197	3185	379	229	2145	271	423	505	173	446	397	152
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.90	0.90	0.92	0.89	0.89	0.92	0.91	0.91	0.92	0.91	0.91
Lanes:	2.00	3.57	0.43	2.00	3.55	0.45	2.00	1.49	0.51	2.00	1.45	0.55
Final Sat.:	3502	6082	724	3502	6037	761	3502	2588	884	3502	2505	957
Capacity Analysis Module:												
Vol/Sat:	0.06	0.52	0.52	0.07	0.36	0.36	0.12	0.20	0.20	0.13	0.16	0.16
Crit Moves:		****		****				****		****		
Green/Cycle:	0.07	0.46	0.46	0.06	0.45	0.45	0.11	0.23	0.23	0.11	0.23	0.23
Volume/Cap:	0.79	1.13	1.13	1.13	0.79	0.79	1.07	0.84	0.84	1.13	0.68	0.68
Delay/Veh:	70.4	96.0	96.0	159.6	29.7	29.7	119.4	51.4	51.4	139.5	44.3	44.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	70.4	96.0	96.0	159.6	29.7	29.7	119.4	51.4	51.4	139.5	44.3	44.3
LOS by Move:	E	F	F	F	C	C	F	D	D	F	D	D
HCM2kAvgQ:	6	53	53	9	22	22	14	15	15	15	11	11

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #24 Beach Boulevard at McFadden Avenue

Cycle (sec):	120	Critical Vol./Cap.(X):	1.057
Loss Time (sec):	16	Average Delay (sec/veh):	76.2
Optimal Cycle:	180	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	6	28	28	6	28	28	6	28	28	6	28	28
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 1	0	2 0	3 1	0	2 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	187	3026	360	218	2038	284	428	494	164	424	391	144
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	187	3026	360	218	2038	284	428	494	164	424	391	144
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	187	3026	360	218	2038	284	428	494	164	424	391	144
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	197	3185	379	229	2145	299	451	520	173	446	412	152
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	197	3185	379	229	2145	299	451	520	173	446	412	152
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	197	3185	379	229	2145	299	451	520	173	446	412	152
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.90	0.90	0.92	0.89	0.89	0.92	0.91	0.91	0.92	0.91	0.91
Lanes:	2.00	3.57	0.43	2.00	3.51	0.49	2.00	1.50	0.50	2.00	1.46	0.54
Final Sat.:	3502	6082	724	3502	5961	831	3502	2610	866	3502	2533	933
Capacity Analysis Module:												
Vol/Sat:	0.06	0.52	0.52	0.07	0.36	0.36	0.13	0.20	0.20	0.13	0.16	0.16
Crit Moves:		****		****				****		****		
Green/Cycle:	0.07	0.46	0.46	0.06	0.45	0.45	0.11	0.23	0.23	0.11	0.23	0.23
Volume/Cap:	0.80	1.13	1.13	1.13	0.80	0.80	1.14	0.85	0.85	1.13	0.70	0.70
Delay/Veh:	71.6	96.0	96.0	159.6	29.9	29.9	143.3	52.8	52.8	139.5	44.8	44.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	71.6	96.0	96.0	159.6	29.9	29.9	143.3	52.8	52.8	139.5	44.8	44.8
LOS by Move:	E	F	F	F	C	C	F	D	D	F	D	D
HCM2kAvgQ:	6	53	53	9	23	23	15	16	16	15	11	11

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #24 Beach Boulevard at McFadden Avenue

Cycle (sec):	120	Critical Vol./Cap.(X):	0.984
Loss Time (sec):	16	Average Delay (sec/veh):	53.8
Optimal Cycle:	180	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	6	28	28	6	28	28	6	28	28	6	28	28
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	1	2 0	1 1	0	2 0	1 1	0
Volume Module:												
Base Vol:	187	3026	360	218	2038	284	428	494	164	424	391	144
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	187	3026	360	218	2038	284	428	494	164	424	391	144
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	187	3026	360	218	2038	284	428	494	164	424	391	144
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	197	3185	379	229	2145	299	451	520	173	446	412	152
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	197	3185	379	229	2145	299	451	520	173	446	412	152
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	197	3185	379	229	2145	299	451	520	173	446	412	152
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.91	0.85	0.92	0.91	0.85	0.92	0.91	0.91	0.92	0.91	0.91
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	1.50	0.50	2.00	1.46	0.54
Final Sat.:	3502	6916	1615	3502	6916	1615	3502	2610	866	3502	2533	933
Capacity Analysis Module:												
Vol/Sat:	0.06	0.46	0.23	0.07	0.31	0.19	0.13	0.20	0.20	0.13	0.16	0.16
Crit Moves:		****		****				****		****		
Green/Cycle:	0.08	0.45	0.45	0.06	0.43	0.43	0.12	0.23	0.23	0.12	0.23	0.23
Volume/Cap:	0.72	1.03	0.53	1.03	0.72	0.43	1.04	0.85	0.85	1.03	0.70	0.70
Delay/Veh:	62.9	58.4	24.8	125.1	29.0	24.2	107.1	52.8	52.8	104.3	44.8	44.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	62.9	58.4	24.8	125.1	29.0	24.2	107.1	52.8	52.8	104.3	44.8	44.8
LOS by Move:	E	E	C	F	C	C	F	D	D	F	D	D
HCM2kAvgQ:	5	41	10	8	19	8	14	16	16	13	11	11

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #25 Beach Boulevard at Center Avenue

Cycle (sec):	90	Critical Vol./Cap.(X):	0.805
Loss Time (sec):	8	Average Delay (sec/veh):	13.0
Optimal Cycle:	65	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	6	0	0	27	27	6	0	6	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 0	0	0 0	4 0	1	2 0	0 0	2	0 0	0 0	0
Volume Module:												
Base Vol:	0	2497	0	0	3527	1041	158	0	532	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2497	0	0	3527	1041	158	0	532	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	2497	0	0	3527	1041	158	0	532	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.00	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	2628	0	0	3713	0	166	0	560	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2628	0	0	3713	0	166	0	560	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2628	0	0	3713	0	166	0	560	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	1.00	1.00	0.91	1.00	0.92	1.00	0.75	1.00	1.00	1.00
Lanes:	0.00	4.00	0.00	0.00	4.00	1.00	2.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	0	6916	0	0	6916	1900	3502	0	2842	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.38	0.00	0.00	0.54	0.00	0.05	0.00	0.20	0.00	0.00	0.00
Crit Moves:					****				****			
Green/Cycle:	0.00	0.67	0.00	0.00	0.67	0.00	0.24	0.00	0.24	0.00	0.00	0.00
Volume/Cap:	0.00	0.57	0.00	0.00	0.81	0.00	0.19	0.00	0.81	0.00	0.00	0.00
Delay/Veh:	0.0	8.2	0.0	0.0	11.9	0.0	27.1	0.0	38.8	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	8.2	0.0	0.0	11.9	0.0	27.1	0.0	38.8	0.0	0.0	0.0
LOS by Move:	A	A	A	A	B	A	C	A	D	A	A	A
HCM2kAvgQ:	0	11	0	0	22	0	2	0	11	0	0	0

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #25 Beach Boulevard at Center Avenue

Cycle (sec):	90	Critical Vol./Cap.(X):	0.810
Loss Time (sec):	8	Average Delay (sec/veh):	13.1
Optimal Cycle:	66	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	6	0	0	27	27	6	0	6	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4	0 0	0 0	4	0 1	2 0	0	0 2	0 0	0	0 0
Volume Module:												
Base Vol:	0	2497	0	0	3555	1062	160	0	532	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2497	0	0	3555	1062	160	0	532	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	2497	0	0	3555	1062	160	0	532	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.00	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	2628	0	0	3742	0	168	0	560	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2628	0	0	3742	0	168	0	560	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2628	0	0	3742	0	168	0	560	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	1.00	1.00	0.91	1.00	0.92	1.00	0.75	1.00	1.00	1.00
Lanes:	0.00	4.00	0.00	0.00	4.00	1.00	2.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	0	6916	0	0	6916	1900	3502	0	2842	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.38	0.00	0.00	0.54	0.00	0.05	0.00	0.20	0.00	0.00	0.00
Crit Moves:					****				****			
Green/Cycle:	0.00	0.67	0.00	0.00	0.67	0.00	0.24	0.00	0.24	0.00	0.00	0.00
Volume/Cap:	0.00	0.57	0.00	0.00	0.81	0.00	0.20	0.00	0.81	0.00	0.00	0.00
Delay/Veh:	0.0	8.2	0.0	0.0	12.0	0.0	27.2	0.0	39.2	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	8.2	0.0	0.0	12.0	0.0	27.2	0.0	39.2	0.0	0.0	0.0
LOS by Move:	A	A	A	A	B	A	C	A	D	A	A	A
HCM2kAvgQ:	0	11	0	0	22	0	2	0	11	0	0	0

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #25 Beach Boulevard at Center Avenue

Cycle (sec):	95	Critical Vol./Cap.(X):	0.994
Loss Time (sec):	8	Average Delay (sec/veh):	36.2
Optimal Cycle:	180	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	6	0	0	27	27	6	0	6	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4 0	0	0 0	4 0	1	2 0	0 0	2	0 0	0 0	0
Volume Module:												
Base Vol:	0	3066	0	0	2869	1208	383	0	1199	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	3066	0	0	2869	1208	383	0	1199	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	3066	0	0	2869	1208	383	0	1199	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.00	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	3227	0	0	3020	0	403	0	1262	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	3227	0	0	3020	0	403	0	1262	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	3227	0	0	3020	0	403	0	1262	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	1.00	1.00	0.91	1.00	0.92	1.00	0.75	1.00	1.00	1.00
Lanes:	0.00	4.00	0.00	0.00	4.00	1.00	2.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	0	6916	0	0	6916	1900	3502	0	2842	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.47	0.00	0.00	0.44	0.00	0.12	0.00	0.44	0.00	0.00	0.00
Crit Moves:		****							****			
Green/Cycle:	0.00	0.47	0.00	0.00	0.47	0.00	0.45	0.00	0.45	0.00	0.00	0.00
Volume/Cap:	0.00	0.99	0.00	0.00	0.93	0.00	0.26	0.00	0.99	0.00	0.00	0.00
Delay/Veh:	0.0	39.6	0.0	0.0	29.4	0.0	16.5	0.0	50.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	39.6	0.0	0.0	29.4	0.0	16.5	0.0	50.0	0.0	0.0	0.0
LOS by Move:	A	D	A	A	C	A	B	A	D	A	A	A
HCM2kAvgQ:	0	34	0	0	28	0	4	0	28	0	0	0

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #25 Beach Boulevard at Center Avenue

Cycle (sec):	90	Critical Vol./Cap.(X):	1.000
Loss Time (sec):	8	Average Delay (sec/veh):	36.2
Optimal Cycle:	180	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	6	0	0	27	27	6	0	6	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	4	0 0	0 0	4	0 1	2 0	0	0 2	0 0	0	0 0
Volume Module:												
Base Vol:	0	3066	0	0	2889	1242	391	0	1199	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	3066	0	0	2889	1242	391	0	1199	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	3066	0	0	2889	1242	391	0	1199	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.00	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	3227	0	0	3041	0	412	0	1262	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	3227	0	0	3041	0	412	0	1262	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	3227	0	0	3041	0	412	0	1262	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	1.00	1.00	0.91	1.00	0.92	1.00	0.75	1.00	1.00	1.00
Lanes:	0.00	4.00	0.00	0.00	4.00	1.00	2.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	0	6916	0	0	6916	1900	3502	0	2842	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.47	0.00	0.00	0.44	0.00	0.12	0.00	0.44	0.00	0.00	0.00
Crit Moves:		****							****			
Green/Cycle:	0.00	0.47	0.00	0.00	0.47	0.00	0.44	0.00	0.44	0.00	0.00	0.00
Volume/Cap:	0.00	1.00	0.00	0.00	0.94	0.00	0.26	0.00	1.00	0.00	0.00	0.00
Delay/Veh:	0.0	39.7	0.0	0.0	29.4	0.0	15.8	0.0	50.2	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	39.7	0.0	0.0	29.4	0.0	15.8	0.0	50.2	0.0	0.0	0.0
LOS by Move:	A	D	A	A	C	A	B	A	D	A	A	A
HCM2kAvgQ:	0	33	0	0	27	0	4	0	27	0	0	0

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #26 Beach Boulevard at Edinger Avenue

Cycle (sec):	120	Critical Vol./Cap.(X):	0.965
Loss Time (sec):	16	Average Delay (sec/veh):	52.4
Optimal Cycle:	173	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	6	35	35	6	38	38	6	28	28	6	33	33
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	4 0	2	2 0	3 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	153	1845	319	534	2800	679	295	1046	187	149	623	326
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	153	1845	319	534	2800	679	295	1046	187	149	623	326
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	153	1845	319	534	2800	679	295	1046	187	149	623	326
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	161	1942	336	562	2947	715	311	1101	197	157	656	343
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	161	1942	336	562	2947	715	311	1101	197	157	656	343
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	161	1942	336	562	2947	715	311	1101	197	157	656	343
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.91	0.85	0.92	0.91	0.75	0.92	0.91	0.85	0.92	0.95	0.85
Lanes:	2.00	3.00	1.00	2.00	4.00	2.00	2.00	3.00	1.00	2.00	2.00	1.00
Final Sat.:	3502	5187	1615	3502	6916	2842	3502	5187	1615	3502	3610	1615
Capacity Analysis Module:												
Vol/Sat:	0.05	0.37	0.21	0.16	0.43	0.25	0.09	0.21	0.12	0.04	0.18	0.21
Crit Moves:		****		****			****					****
Green/Cycle:	0.05	0.36	0.36	0.15	0.45	0.54	0.08	0.30	0.35	0.06	0.28	0.28
Volume/Cap:	0.86	1.05	0.59	1.05	0.94	0.47	1.05	0.72	0.35	0.71	0.66	0.77
Delay/Veh:	87.8	75.6	33.1	104.8	37.5	17.3	122.3	39.4	29.3	65.1	40.2	48.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	87.8	75.6	33.1	104.8	37.5	17.3	122.3	39.4	29.3	65.1	40.2	48.2
LOS by Move:	F	E	C	F	D	B	F	D	C	E	D	D
HCM2kAvgQ:	5	36	10	17	33	9	10	14	5	4	12	13

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #26 Beach Boulevard at Edinger Avenue

Cycle (sec):	120	Critical Vol./Cap.(X):	0.965
Loss Time (sec):	16	Average Delay (sec/veh):	52.8
Optimal Cycle:	173	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	6	35	35	6	38	38	6	28	28	6	33	33
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	4 0	2	2 0	3 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	169	1845	319	534	2800	707	295	1057	191	149	634	326
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	169	1845	319	534	2800	707	295	1057	191	149	634	326
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	169	1845	319	534	2800	707	295	1057	191	149	634	326
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	178	1942	336	562	2947	744	311	1113	201	157	667	343
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	178	1942	336	562	2947	744	311	1113	201	157	667	343
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	178	1942	336	562	2947	744	311	1113	201	157	667	343
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.91	0.85	0.92	0.91	0.75	0.92	0.91	0.85	0.92	0.95	0.85
Lanes:	2.00	3.00	1.00	2.00	4.00	2.00	2.00	3.00	1.00	2.00	2.00	1.00
Final Sat.:	3502	5187	1615	3502	6916	2842	3502	5187	1615	3502	3610	1615
Capacity Analysis Module:												
Vol/Sat:	0.05	0.37	0.21	0.16	0.43	0.26	0.09	0.21	0.12	0.04	0.18	0.21
Crit Moves:		****		****			****					****
Green/Cycle:	0.05	0.36	0.36	0.15	0.45	0.54	0.08	0.30	0.35	0.06	0.28	0.28
Volume/Cap:	0.94	1.05	0.59	1.05	0.94	0.49	1.05	0.73	0.36	0.71	0.67	0.77
Delay/Veh:	104.8	75.6	33.1	104.8	37.8	17.6	122.3	39.6	29.4	65.1	40.5	48.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	104.8	75.6	33.1	104.8	37.8	17.6	122.3	39.6	29.4	65.1	40.5	48.2
LOS by Move:	F	E	C	F	D	B	F	D	C	E	D	D
HCM2kAvgQ:	6	36	10	17	33	10	10	15	6	4	12	13

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #26 Beach Boulevard at Edinger Avenue

Cycle (sec):	120	Critical Vol./Cap.(X):	0.898
Loss Time (sec):	16	Average Delay (sec/veh):	43.7
Optimal Cycle:	128	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	6	35	35	6	38	38	6	31	31	6	33	33
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	2	2 0	3 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	169	1845	319	534	2800	707	295	1057	191	149	634	326
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	169	1845	319	534	2800	707	295	1057	191	149	634	326
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	169	1845	319	534	2800	707	295	1057	191	149	634	326
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	178	1942	336	562	2947	744	311	1113	201	157	667	343
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	178	1942	336	562	2947	744	311	1113	201	157	667	343
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	178	1942	336	562	2947	744	311	1113	201	157	667	343
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.91	0.85	0.92	0.91	0.75	0.92	0.91	0.85	0.92	0.95	0.85
Lanes:	2.00	4.00	1.00	2.00	4.00	2.00	2.00	3.00	1.00	2.00	2.00	1.00
Final Sat.:	3502	6916	1615	3502	6916	2842	3502	5187	1615	3502	3610	1615
Capacity Analysis Module:												
Vol/Sat:	0.05	0.28	0.21	0.16	0.43	0.26	0.09	0.21	0.12	0.04	0.18	0.21
Crit Moves:	****				****		****					****
Green/Cycle:	0.05	0.32	0.32	0.18	0.45	0.54	0.09	0.31	0.36	0.06	0.28	0.28
Volume/Cap:	0.96	0.87	0.65	0.91	0.96	0.49	0.96	0.70	0.34	0.75	0.67	0.77
Delay/Veh:	109.8	42.5	37.7	65.4	40.4	17.6	92.4	37.9	28.3	69.7	40.5	48.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	109.8	42.5	37.7	65.4	40.4	17.6	92.4	37.9	28.3	69.7	40.5	48.2
LOS by Move:	F	D	D	E	D	B	F	D	C	E	D	D
HCM2kAvgQ:	6	21	11	14	34	10	9	14	5	5	12	13

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #26 Beach Boulevard at Edinger Avenue

Cycle (sec):	120	Critical Vol./Cap.(X):	1.101
Loss Time (sec):	16	Average Delay (sec/veh):	95.1
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	6	35	35	6	38	38	6	28	28	6	33	33
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	4 0	2	2 0	3 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	454	2278	605	427	2781	812	401	968	315	322	834	267
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	454	2278	605	427	2781	812	401	968	315	322	834	267
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	454	2278	605	427	2781	812	401	968	315	322	834	267
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	478	2398	637	449	2927	855	422	1019	332	339	878	281
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	478	2398	637	449	2927	855	422	1019	332	339	878	281
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	478	2398	637	449	2927	855	422	1019	332	339	878	281
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.91	0.85	0.92	0.91	0.75	0.92	0.91	0.85	0.92	0.95	0.85
Lanes:	2.00	3.00	1.00	2.00	4.00	2.00	2.00	3.00	1.00	2.00	2.00	1.00
Final Sat.:	3502	5187	1615	3502	6916	2842	3502	5187	1615	3502	3610	1615
Capacity Analysis Module:												
Vol/Sat:	0.14	0.46	0.39	0.13	0.42	0.30	0.12	0.20	0.21	0.10	0.24	0.17
Crit Moves:		****		****			****				****	
Green/Cycle:	0.12	0.38	0.38	0.11	0.37	0.47	0.10	0.27	0.39	0.11	0.28	0.28
Volume/Cap:	1.14	1.20	1.03	1.20	1.14	0.64	1.20	0.74	0.53	0.88	0.88	0.63
Delay/Veh:	140.5	133	79.6	167.4	106	25.0	169.0	42.5	29.5	72.7	51.2	41.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	140.5	133	79.6	167.4	106	25.0	169.0	42.5	29.5	72.7	51.2	41.2
LOS by Move:	F	F	E	F	F	C	F	D	C	E	D	D
HCM2kAvgQ:	16	52	31	16	45	14	15	14	10	9	19	10

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

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Intersection #26 Beach Boulevard at Edinger Avenue

****

Cycle (sec):	120	Critical Vol./Cap.(X):	1.109	
Loss Time (sec):	16	Average Delay (sec/veh):	97.6	
Optimal Cycle:	180	Level Of Service:	F	

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	6	35	35	6	38	38	6	28	28	6	33	33
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	4 0	2	2 0	3 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	486	2278	605	427	2781	832	401	1013	345	322	858	267
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	486	2278	605	427	2781	832	401	1013	345	322	858	267
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	486	2278	605	427	2781	832	401	1013	345	322	858	267
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	512	2398	637	449	2927	876	422	1066	363	339	903	281
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	512	2398	637	449	2927	876	422	1066	363	339	903	281
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	512	2398	637	449	2927	876	422	1066	363	339	903	281
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.91	0.85	0.92	0.91	0.75	0.92	0.91	0.85	0.92	0.95	0.85
Lanes:	2.00	3.00	1.00	2.00	4.00	2.00	2.00	3.00	1.00	2.00	2.00	1.00
Final Sat.:	3502	5187	1615	3502	6916	2842	3502	5187	1615	3502	3610	1615
Capacity Analysis Module:												
Vol/Sat:	0.15	0.46	0.39	0.13	0.42	0.31	0.12	0.21	0.22	0.10	0.25	0.17
Crit Moves:		****		****			****				****	
Green/Cycle:	0.13	0.38	0.38	0.11	0.37	0.47	0.10	0.27	0.39	0.11	0.28	0.28
Volume/Cap:	1.16	1.20	1.03	1.20	1.16	0.66	1.20	0.78	0.57	0.88	0.91	0.63
Delay/Veh:	146.5	133	79.6	167.4	114	26.0	169.0	43.6	30.0	72.7	54.1	41.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	146.5	133	79.6	167.4	114	26.0	169.0	43.6	30.0	72.7	54.1	41.2
LOS by Move:	F	F	E	F	F	C	F	D	C	E	D	D
HCM2kAvgQ:	17	52	31	16	46	15	15	15	11	9	21	10

****

Note: Queue reported is the number of cars per lane.

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PM Cum Plus Project
2.13.3396.2 Goldenwest College
Caltrans - MITIGATION

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #26 Beach Boulevard at Edinger Avenue

Cycle (sec):	120	Critical Vol./Cap.(X):	1.085
Loss Time (sec):	16	Average Delay (sec/veh):	78.1
Optimal Cycle:	180	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	6	35	35	6	38	38	6	31	31	6	33	33
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	4 0	1	2 0	4 0	2	2 0	3 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	486	2278	605	427	2781	832	401	1013	345	322	858	267
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	486	2278	605	427	2781	832	401	1013	345	322	858	267
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	486	2278	605	427	2781	832	401	1013	345	322	858	267
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	512	2398	637	449	2927	876	422	1066	363	339	903	281
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	512	2398	637	449	2927	876	422	1066	363	339	903	281
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	512	2398	637	449	2927	876	422	1066	363	339	903	281
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.91	0.85	0.92	0.91	0.75	0.92	0.91	0.85	0.92	0.95	0.85
Lanes:	2.00	4.00	1.00	2.00	4.00	2.00	2.00	3.00	1.00	2.00	2.00	1.00
Final Sat.:	3502	6916	1615	3502	6916	2842	3502	5187	1615	3502	3610	1615
Capacity Analysis Module:												
Vol/Sat:	0.15	0.35	0.39	0.13	0.42	0.31	0.12	0.21	0.22	0.10	0.25	0.17
Crit Moves:	****				****		****				****	
Green/Cycle:	0.13	0.37	0.37	0.12	0.36	0.47	0.10	0.28	0.40	0.10	0.28	0.28
Volume/Cap:	1.17	0.94	1.07	1.07	1.17	0.66	1.17	0.75	0.56	0.94	0.91	0.63
Delay/Veh:	149.4	44.5	95.1	116.8	118	25.9	154.4	41.9	28.9	85.3	54.1	41.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	149.4	44.5	95.1	116.8	118	25.9	154.4	41.9	28.9	85.3	54.1	41.2
LOS by Move:	F	D	F	F	F	C	F	D	C	F	D	D
HCM2kAvgQ:	17	28	33	14	46	15	15	14	11	10	21	10

Note: Queue reported is the number of cars per lane.

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